NAME INDEX.

ALLEN, F. H., The Microbiological Aspects of Gasoline Inhibitors, 9–15
AMBROSE, G. S., on Electrical Practice in the Petroleum Industry, 400
ANDRADE, E. N. de C., on Greases for Ball-Bearings, 322
——, on Rheology, 315–316
——, on Viscosity, 316–317
ASTER, K., on Engine Testing of Heavy-Duty Oils, 375
ASPHALTIC BITUMEN SUB-COMMITTEE, Flow Test for Asphaltic Bitumen, 450–451
AULD, S. J. M., on Engine Deposits, 332
——, on Lubricating Greases, 334–335, 336, 338
——, on Viscosity Index, 328–329

BARR, G., on Viscometry, 316, 319
BARTON, C. H., on Engine Testing of Heavy-Duty Oils, 376–377
BELL, ——, on Greases for Ball Bearings, 320–321
BIBBE, V., on Bulk Oil Measurement, 234
——, on Viscosity Index, 329–330
BOWMAN, J. R. *See* KAPFF, S. F.
BROOM, W. E. J., Stability of Fuel Oil, 347–352, 359, 360
——, on Engine Testing of Heavy Duty Oils, 373–374
——, on Viscosity Index, 327

CAMERON, A., The Determination of the Pressure-Viscosity Coefficient and Molecular Weight of Lubricating Oils by means of the Temperature–Viscosity Equations of Vogel and Eyring, 401–414
——, The Isothermal and Adiabatic Compressibilities of Oil, 421–427, 494
CHETWIN, H. W., on Greases for Ball-Bearings, 323–324
CLAYTON, D., on Engine Testing of Heavy-Duty Oils, 374
CLUER, A., on Bulk Oil Measurement, 234
CRAGG, J. C., on Viscometry, 317

DAVEY, W., Some Observations on the Mechanism of the Development of Extreme Pressure Lubricating Properties by Reactive Sulphur in Mineral Oils, 154–158
——, The Extreme Pressure Lubricating Properties of Some Chlorinated Compounds as Assessed by the Four-Ball Machine, 73–88
DRAPER, P. *See* SWEETLAND, L. B.
DUNSTAN, E. J., on Viscometry, 319
DURHAM, J. G., The Use of Liquid-in-Glass Thermometers, 356–357, 361, 494

ENGINE TESTS SUB-COMMITTEE, Calibration of C.F.R. Reference Fuels, 236–237
EVANS, E. A., on Engine Testing of Heavy-Duty Oils, 372–373
——, on Greases for Ball-Bearings, 322
——, on Engine Deposits, 331
——, on Lubricating Greases, 337
——, on Viscosity Index, 326
EVANS, E. B., on Sulphur Estimation, 359

FORD, A. L., on Electrical Practice in the Petroleum Industry, 395
FOSSETT, H., on Electrical Practice in the Petroleum Industry, 394–395
FROST, J., Oil Migration, 486–493

GABRIEL, L. G., The Problem of Devising Tests for Soil Stabilization, 353–355
GARNER, F. H., on Electrical Practice in the Petroleum Industry, 393, 399
——, on Engine Testing of Heavy Duty Oils, 369
——, on Oil Measurement, 358
——, on Rheology, 325
——, on Soil Stabilization, 360
——, on Stability of Fuel Oil, 359
——, on Sulphur Estimation, 358
GIBBONS, G. C., on Engine Deposits, 331
GILBERT, C. L., Classification of Abstracts, 23–25
GILLETT, A. W., on Electrical Practice in the Petroleum Industry, 398
GORDON, R. R., and POWELL, H., Quantitative Liquid Phase Hydrocarbon Analysis by Infra-red Absorption, 191–212
——, Spectroscopic Analyses, 428–449
GOSSLING, P. W. L., on Engine Testing of Heavy-Duty Oils, 375–376

HARDIMAN, E. W., and NISSAN, A. H., A Rational Basis for the Viscosity Index System, Part I, 255–270, 330–331
HEAVY DUTY ENGINE OIL PANEL, The Engine Testing of H.D. Oils, 362–368
HOLMES, A. N., on Bulk Oil Measurement, 235

HORSLEY, J. A. B., on Electrical Practice in the Petroleum Industry, 396, 399
HUNN, S. A. *See* MITCHELL, R. G.
HYAMS, H., Some Aspects of Standardization in Oil Measurement, 339–342, 358
——, on Bulk Oil Measurement, 235
HYDE, J. W., on Viscosity Index System, 325, 327

INDRA, M. K. *See* MUKHERJEE, J. N.

JACKSON, J. S., on Liquid-in-Glass Thermometers, 361
——, on Oil Measurement, 358
——, on Soil Stabilization, 360, 361
——, on Stability on Fuel Oil, 359
——, on Sulphur Estimation, 359
JAVES, A. R., Sulphur Estimation by Lamp Method using I.P. Test 107/45(T), 343–346, 359
——, The Estimation of the Sulphur Content of Petroleum Distillates, 129–153
——, on Soil Stabilization, 360
JONES, H. F., on Engine Testing of Heavy-Duty Oils, 372, 375
——, on Stability of Fuel Oils, 360

KAPFF, S. F., BOWMAN, J. R., and LOWY, A., Correlation of Chemical Constitution and Oxidation Susceptibility of Lubricating Oil Components, 453–474
KARPINSKI, Z. *See* LAHIRI, A.
KENDALL, C. E., on Viscometry, 319
KELLY, C. I., on Viscometry, 316
——, on Viscosity Index, 327
KERR, P., on Bulk Oil Measurement, 233
——, on Oil Measurement, 358
——, on Stability of Fuel Oil, 360
KROCH, E., Ammonia—A Fuel for Motor Buses, 213–223

LAHIRI, A., KARPINSKI, Z., and MARDLES, E. W. J., The Problem of Engine Deposits, 271–302, 332–333
——, on Lubricating Greases, 335
——, on Viscometry, 319
LAWRENCE, A. S. C., Lubricating Greases, 303–314, 335–338
LIQUEFIED GASES PANEL, The Analysis of Liquefiable Hydrocarbons by Distillation, 16–22
LOWY, A. *See* KAPFF, S. F.

MACLEAN, A. D., Code of Electrical Practice for the Petroleum Industry, 379–392, 393–400
MAGUINESS, R., on Bulk Oil Measurement, 235
MANN, F. H., on Electrical Practice in the Petroleum Industry, 395–396
MARDLES, E. W. J., on Engine Deposits, 333–334
——, on Lubricating Greases, 337
——, on Viscometry, 319
——. *See also* LAHIRI, A.
MARGOSCHES, K. G., Classification of Crude Oils, 1–8
MEASUREMENT OF OIL DEPTHS PANEL. Measurement of Oil Depths, 40–72
MITCHELL, R. G., and HUNN, S. A., "Eagle" Single Compartment Bottom Sampler, 415–417
MOLD, C. E., on Greases for Ball-Bearings, 322
MORRIS, W. S., on Electrical Practice in the Petroleum Industry, 396, 398
MORTON, F., and RICHARDS, A. R., Analysis of Trinidad Crude Oils. Part II—Paraffinic Oils, 159–172
MUKHERJEE, J. N., and INDRA, M. K., Diagnostic Characteristics of Crude Oil: Fluorescence Analysis in Ultra-Violet Light, 173–178
MURPHY, B. A., The Chemistry and Constitution of Asphalts, 475–485

NISSAN, A. H., on Lubricating Greases, 337–338
——, on Viscometry, 317, 320
——, on Viscosity Index, 326, 327, 328
——. *See also* HARDIMAN, E. W.
NOMENCLATURE SUB-COMMITTEE, Second List of Definitions, 188–190

PARKER, J. S., on Bulk Oil Measurement, 233
PAYSANT, C., on Viscosity Index System, 326
PETHRICK, S. R., The Testing of Greases for Ball Bearings, 248–254, 323, 324
——, on Lubricating Greases, 338
POHL, W., on Engine Testing of Heavy-Duty Oils, 375
POWELL, H. *See* GORDON, R. R.
PRACY, H. E. F., on Bulk Oil Measurement, 234
PREIST, T. P., on Electrical Practice in the Petroleum Industry, 397

RANKINE, A. O., on Viscometry, 316
RAPPOPORT, F. G., on Electrical Practice in the Petroleum Industry, 399
RAYNOR, —, on Electrical Practice in the Petroleum Industry, 398
REDGROVE, E. R., on Engine Testing of Heavy-Duty Oils, 371
RICHARDS, A. R. *See* MORTON, F.
RUFFELL, H., on Viscometry, 316

SAMUEL, D. L., on Greases for Ball-Bearings, 322

SAMUEL, D. L., on Lubricating Greases, 335–336
—, on Viscometry, 317
SCOTT-BLAIR, G. W., on Greases for Ball-Bearings, 323
—, on Lubricating Grease, 335
—, on Viscometry, 318
SOLTZ, C. D., on Engine Testing of Heavy-Duty Oils, 373
SOUTHWELL, C. A. P., Petroleum in England, 27–39
STANSFIELD, R., on Engine Testing of Heavy-Duty Oils, 370–371
STARK, A. R., on Soil Stabilization, 361
—, on Stability of Fuel Oil, 359, 360
STEINER, L. A., on Viscometry, 318
STOKOE, E., Bulk Oil Measurement, 224–232, 233–235
SUEN, T. J., and YAO, F. H., Some Chinese Clays as Adsorping Agents, 179–187
SWEETLAND, L. B., and DRAPER, P., Improved Accuracy of C.F.R. Motor Method Test for High Octane Rating; with Continuous Scale from 40 to 120 O.N., 105–110

THORNTON, E., on Electrical Practice in the Petroleum Industry, 397, 399
—, on Engine Testing of Heavy Duty Oils, 372
TURNER, J. K., on Bulk Oil Measurement, 234
TWEED, R. R., on Electrical Practice in the Petroleum Industry, 394

UNDERWOOD, A. J. V., Fractional Distillation of Ternary Mixtures, Part I, 111–118

VISCOSITY PANEL, The Precision and Accuracy of Viscometry Using B.S.I. Tubes, 239–247

WAELE, A. de, on Engine Deposits, 333
WEATHERILL, F., on Engine Testing of Heavy-Duty Oils, 375
WEBBER, M. W., Improvements in Lubricating Greases, 89–102
——, on Greases for Ball-Bearings, 322
——, on Lubricating Greases, 338
WEST, H. L., on Lubricating Greases, 336
WILFORD, A. T., on Engine Testing of Heavy Duty Oils, 374, 377
WINDEBANK, C. S., on Engine Testing of Heavy-Duty Oils, 369–370
——, on Stability of Fuel Oil, 359
WITHERS, J. G., on Engine Testing of Heavy Duty Oils, 372

YAO, F. H. *See* SUEN, T. J.
YUSTER, S. T., Problems and Research in Water Flooding, 121–128

SUBJECT INDEX.

Abstracts, Revised Classification of, 23–25
Adiabatic and Isothermal Compressibilities of Oil, 421–427, 494
Adsorbing Agents, Some Chinese Clays as, 179–187
Ammonia, as a Motor Fuel, 213–223
Asphaltic Bitumen, Flow Test for, 450–451
Asphalts, Chemistry and Constitution of, 475–485

Ball-bearings, greases for, testing of, 248–254
Bottom Sampling, 415–417
B.S.I. U-Tube Viscometers, precision and accuracy of, 239–247
Bulk Oil Measurement, 224–235

C.F.R. Motor Method Test for High Octane Rating, improved accuracy of, 105–110
C.F.R. Reference Fuels, calibration of, 236–237
Chlorinated Compounds, extreme-pressure lubricating properties of, 73–88
Clays, Chinese, as adsorbing agents, 179–187
Crude Oil, fluorescence analysis in ultra-violet light, 173–178
Crude Oils, classification of, 1–8
Crude Oils, Trinidad, analysis of, 159–172

Definitions, second list of, 188–190

"Eagle" Single-Compartment Bottom Sampler, 415–417
Electrical Practice for the Petroleum Industry, code of, 379–400
Engine Deposits, 271–302
England, petroleum in, 27–39
Extreme Pressure Lubricating Properties of Chlorinated Compounds, 73–88
Extreme Pressure Lubricating Properties of Mineral Oils containing Free Sulphur or Active Sulphur Compounds, 154–158

Flow Test for Asphaltic Bitumen, 450–451
Four-Ball Machine, 73–88
Fuel Oil, stability of, 347–352

Greases for Ball-Bearings, testing of, 248–254
Greases, lubricating, 89–102, 303–314

Heavy-Duty Oils, engine testing of, 362–377

Infra-Red Absorption Analysis, 191–212
Inhibitors, Gasoline, microbiological aspects of, 9–15
Isothermal and Adiabatic Compressibilities of Oil, 421–427, 494

Liquefiable Hydrocarbons, analysis of, by distillation, 16–22
Lubricating Greases, 303–314
Lubricating Greases, improvements in, 89–102
Lubricating Oil Components, oxidation susceptibility, 453–474
Lubricating Oils, determination of the pressure-viscosity coefficient and molecular weight of, 401–414

Measurement of Oil, standardization in, 339–342
Measurement of Oil Depths, 40–72
Measurement of Oil in Bulk, 224–235
Microbiological aspects of gasoline inhibitors, 9–15

Octane Rating, high, 105–110
Octane Scale, extension of, above 100 O.N., 418–420
Oil Depths, measurement of, 40–72
Oil Measurement, some aspects of standardization in, 339–342
Oil Migration, 486–493

Quantitative Liquid Phase Hydrocarbon Analysis, 191–212

Rheology, 239–338

Sampling, by means of "Eagle" single-compartment bottom sampler, 415–417
Soil Stabilization, tests for, 353–355
Spectroscopic Analyses, 428–449
Sulphur Content of Petroleum Distillates, estimation of, 129–153
Sulphur Estimation by Lamp Method, 343–346

Ternary Mixtures, fractional distillation of, 111–118
Thermometers, liquid-in-glass, 356–357, 494
Trinidad Crude Oils, analysis of, 159–172

Viscosity Index System, 255–270

Water Flooding, 121–128

Ab
Ab
Ab
Ab
Ab
Ab
Ac
Ad
Ad
Ag
Ag
Ag
Al
Al
Al
Al
Al
Al
Al
Al
Al
Al
Al
Al
Al
Al
Al
Al
Al
Al
Al
Al
Ap
Ap
Ap
Ar
Ar
Ar
At
At
Au
Au
Av

Ba
Ba
Ba

ABSTRACTS AUTHOR INDEX.

Numbers refer to Abstract numbers.

Abbey, D. E., 773
Abegg, W. A., 740
Abegg, W. E., 1313
Abere, J., 1145
Abernathy, C. G., 373
Abramowitz, W., 376
Acree, S. F., 955
Adams, E. W., 374
Adams, J. E., 881
Agnew, R. D., 1313
Agroskil, A. A., 1264
Aguas, M. S., 1019
Ainsworth, A. N., 1361
Albert, E. R., 545, 712
Albert, W. C., 960
Albertson, M. M., 303
Alcock, L. M., 499
Alekseevskil, E. V., 642
Alexander, A. W., 20
Alexander, C. I., 211
Alimarin, I. P., 496
Allen, F. H., 1074
Allen, P. C., 605
Allher, J. G., 67
Anderson, A. P., 141
Anderson, D. E., 1376
Anderson, J. G. C., 375
Andreev, E. A., 73 A
Andresen, K. H., 1019
Andrews, F. M., 901
Annesley, G., 303
Antsus, L. I., 120
Appalachian Geological Society, 211
Applin, E. R., 873
Applin, P. L., 873
Arnold, R. T., 107
Arps, J. J., 283
Arutanoff, A., 1313
Attaway, D., 1230
Attaway, P., 79
Auerheimer, A. H., 98
Ausburn, F. P., 563
Avramenko, V. I., 73 A

Babcock, D. F., 67
Babson, E. C., 1109, 1306
Back, R. C., 661
Backoff, W. J., 657
Badeley, G., 112
Baden, M. W., 680
Badgley, L. C., 1019, 1313
Baer, H., 92
Bailey, L. H., 563
Baily, E. C., 740
Baker, J. W., 111
Baker, R. C., 1019, 1313
Balandin, A. A., 480
Baldwin, H. L., 884
Bancroft, C. C., 303
Baranov, V., 1206
Baranovskaya, N. V., 648
Barnes, C. H., 1019, 1313
Barnes, H., 646
Barnes, K. B., 295, 296, 434, 439, 719, 721, 728, 790, 913, 991, 1105, 1114, 1211, 1212, 1301
Barnes, R. A., 107
Barnhart, W. J., 303
Barnicoat, C. R., 355
Barr, K. W., 232
Barratt, G. J., 740
Barron, H., 522
Barron, J. M., 631
Barrleson, J. D., 1382
Barton, D. C., 700
Barton, P. D., 473
Bashkirov, A. N., 492, 666
Bassinger, R., 303
Baster, F. S., 614
Bateman, L., 489
Bates, J. R., 333
Baurnschmidt, A. J., 177
Bayard, R. A., 782
Bays, C. A., 287
Beach, F. K., 306, 681
Beach, M. D., 140
Beal, C., 1310
Beardmore, H. F., 1295
Beare, L. E., 657
Beckman, A. O., 644
Beeman, D. L., 813
Bekkedahl, N., 1349
Bell, A. H., 211
Bell, D. B., 339
Bell, F. W., 1159
Beltz, E. W., 893
Benckenstein, C. H., 303
Bender, J. C., 1019
Benke, R., 1313
Bennett, E. O., 1313
Bennett, J. G., 237
Bergmann, F., 81
Berkengelm, A. M., 142
Berl, E., 1247
Berl, W. G., 1247
Berlin, C. J., 925
Berliner, E., 87
Berndt, R. J., 83
Berwald, W. B., 1019
Beskin, L., 780
Betz, J. D., 1317
Biertuempfel, R. E., 101
Billinghame, A. V., 516
Birkhimer, E. R., 73
Bissell, E. S., 1033
Blade, O. C., 367
Blair, C. M., 303, 1218
Blair, W. P., 1019
Blank, W. H., 781
Blankenhorn, C. F., 1313
Blanpied, B. W., 210
Blaylock, P. W., 1126
Bleu, K., 292, 302
Blidchenko, I. F., 1080
Bloch, H. S., 78, 634
Blodgett, R., 956
Bogart, G. L. V., 1316
Boguslavskaya, N. A., 1232
Bolton, E. K., 966
Bond, D. C., 303, 563, 1019
Booth, S., 612, 853
Borden, J. L., 211
Borland, C. D., 556
Bourne, A. I., 235
Bowden, F. P., 1163
Bowen, E. J., 114
Bowles, R. R., 1348
Bowles, V. O., 1136
Bowsky, M. C., 563
Boyd, D. M., 1341
Boyd, J. H., 839
Boyer, R. L., 1393
Boynton, A., 303, 1313
Bradley, T. F., 373
Brameld, V., 1362
Bramlette, M. N., 7
Brandt, D. G., 331
Bray, G. T., 901
Brenneke, A. M., 301
Brewer, A. K., 1239
Brickwedde, F. G., 1349
Bridgwater, R. M., 149, 521, 793, 794, 1045, 1336, 1337
Brink, K. C. ten., 303
Britt, K. W., 523
Broeck, H. T., 809
Bronen, B. K., 1179
Brooke, L. F., 336
Brooks, D. B., 1366
Broom, W. E. J., 1377
Brothman, A., 1037
Brown, C. G., 318, 1236
Brown, C. L., 1328
Brown, G. G., 1351
Brown, G. M., Jr., 106
Brown, H., 563
Brown, O. J., 364
Brown, P. B., 563
Bruce, J., 941
Brummerstedt, E. F., 776, 1346
Brunner, E., 1103
Brunner, F. H., 70
Buchadahl, R., 1188
Buckley, S. F., 1313
Buell, A. E., 579, 1333
Bullock, H. L., 1035
Bulnes, A. C., 1008
Bunch, E. S., 46
Burch, J. G., 34
Burk, R. E., 135, 1382
Burnett, T. J., 211
Burt, C. E., 1019, 1313
Busvine, J. R., 1171
Buthod, P., 62, 63, 327
Butler, D. E., 1313
Butz, L. W., 85
Byrd, E. E., 1313
Byrns, A. C., 331

Cahn, R. S., 837
Calhoun, J. C., 557, 558, 917, 918
Camelford, J. A., 339
Cameron, A., 1354
Campaigne, E., 349
Campbell, G. A., 379
Campbell, J. G., 563
Campbell, W. E., 1019
Caraway, A. F., 1311
Cardwell, W. T., 1104
Carrol, D. L., 707, 983, 1224
Carter, G. A., 601
Carter, W., 841
Cass, R., 159
Cauley, S. P., 947
Cavins, O. A., 1294
Cecil, C. J., 284, 1300
Chamberlain, L. C., 1019, 1313
Chapman, J. A., 415
Chapman, T. S., 303
Charnuil, I. A., 419, 1005
Chastian, J., 1019
Chegis, A. F., 145
Chenault, R. L., 303
Cheng, Fa-Wu., 653
Chenicek, J. A., 132, 796
Chernozhukov, N. I., 1256
Chervuishev, A. B., 670, 1268
Christman, F., 852
Church, W. L., 1019
Clark, C. L., 945
Clark, G. L., 958
Clark, K. A., 1198

Clark, L. M., 499
Clark, S. K., 4, 204
Clark, W. A., 563
Clarke, L. A., 70
Clason, C. E., 912
Clayton, J. O., 135, 657
Clifton, R. L., 861
Clinedinst, W. O., 1097, 1281
Clive, J. K., 349
Coates, G. E., 323
Coblenz, W. A., 1293
Cole, C. L., 205
Cole, H. J., 563
Collier, G. P., 321
Colwell, A. T., 1376
Comings, E. W., 819
Condit, P. C., 135, 141
Conn, A. L., 637
Considine, D. M., 1032
Cook, A. B., 1003
Cook, E. W., 135, 372
Coombs, G. G., 471
Coonrod, P., 303
Cooper, G. A., 874
Coplen, G., 1019
Corcoran, W. H., 1348
Corner, E. S., 1356
Corrin, J. B., 914
Corvin, R. O., 598
Corwin, A. H., 350
Coulson, E. A., 650, 651
Cowan, W. L., 1338
Cozzens, F. R., 562
Crake, W. S., 1207, 1208, 1209, 1274, 1275, 1313
Crake, W. St. M. E., 303, 1019
Cram, J. H., 867
Cramer, C., 124
Cravath, A. M., 563
Crawford, F. W., 231
Crawford, J. G., 126
Crawford, R. M., 1029
Creighton, T. A., 1019
Cremer, H. W., 1190
Crenshaw, W. E., 773
Crespin, L., 5
Crickmer, C. S., 563
Cropper, F. R., 361
Crossley, H. E., 483, 484
Culmer, T. W., 958
Cummings, R. E., 1376
Curran, J. F., 160
Curtis, J. C., 1019
Curtis, L. C., 1019

Dahlgren, E. G., 242, 1272
Dale, C. R., 563
Dalton, S. D., 947
Daly, J. W., 198
Damm, W. W., 326
Dansby, R. E., 1093, 1094, 1095
D'arcy, N., 711
D'Aragon, H. J., 772
Davey, W., 1077, 1088
David, W. A. L., 515
Davies, R., 967
Davies, R. A., 1251
Davis, E., 33
Davis, E. L., 1313
Davis, E. N., 851
Davis, R. L., 341
Davtyan, N. A., 1263
Dawe, H. F., 803
Dawson, R. D., 1313
Day, R. A., 106
Day, R. B., 637
Day, R. J., 551
Deadman, A. L., 497
Decker, C. E., 162
Deegan, C. J., 678, 692, 697, 877
DeGoyler, E., 113, 934
Delattre, J., 333
Delmonte, J., 673
Dempsey, H. J., 78
Denison, A. R., 863
Denison, G. H., 134, 135, 141
Dennell, R., 849
Denton, L. E., 1313
Desjardins, L., 164
Dewees, E. J., 1003
Dial, L. H., 25
Dibeler, V. H., 1239
Dick, J., 832
Dickenson, E. H., 563
Dickinson, N. L., 791
Dimmig, H., 791
Dinder, R. C., 117
Dismukes, A. B., 563, 1313
Dittrich, E., 1157
Dobryanskii, A. F., 1050
Dobson, W. M., 1313
Doll, H. G., 303, 740
Dolnick, A. A., 109
Donnelly, A. S., 211
Dott, R. H., 170
Dotterwiech, F. H., 825
Douglas, N., 1019
Dowd, B. J., 414
Draper, P., 1069
Driscoll, D. L., 1313
Dryer, C. G., 796
Dunbar, R. O., 882
Dunham, G. S., 1137
Dunlay, E. E., 330
Dunstan, E. J., 609
Durham, J. G., 1371
D'Yakova, M. K., 519, 520, 1085, 1263
Dykes, H., 362
Dykstra, H., 292

Ebeling, W., 836
Eckel, J. E., 1313
Edel'shtein, H. G., 145, 669
Edwards, A. O., 303
Edwards, W. R., 86
Egloff, A., 817
Egloff, G., 127, 333, 506, 585, 946
Ehlers, A., 168
Ellinger, W. H., 1019
Ellingson, R. C., 350
Elliott, G. R., 203, 1217
Elliott, L. P., 336
Ellis, W. J., 1066
Ellisor, A. V., 878
Elrod, H. G., 1321
Ermolin, G. M., 648
Esafov, V. I., 1061
Eschinazi, H. E., 81
Etzler, D. E., 657
Evans, D. E., 802
Evering, B. L., 337, 797
Every, E. D., 1019
Exline, P. G., 1152

Fagen, N., 337
Fagin, K. M., 727, 903, 989, 990, 1106, 1210, 1271, 1278
Fales, J. H., 850
Fales, J. M., 596
Farerov, I. L., 670
Farrington, B. B., 135, 657
Fash, R. H., 858
Faust, J., 657
Fay, J. W. J., 64
Fearon, R. E., 563, 1019, 1092, 1313
Fedoseeva, O., 1257
Feldman, S. M., 1037
Ferris, A. T., 303
Fillan, C. T., 544
Filley, E. R., 563
Finley, W. L., 372
Finn, F. H., 914
Firth, F. G., 1058, 1158, 1242
Fischer, F., 75
Fischer, F. K., 383
Fischer, H. G. M., 74
Fischer, J. R., 91
Fisher, C. H., 351
Fitt, R. L., 1190
Fitting, R. U., 1008, 1313
Fitzpatrick, J. J., 303
Fitz-Simmons, K. R., 1243
Flaxman, M. T., 1019
Flesher, S. A., 1152
Florez, L. de, 67
Folkins, H. O., 631
Forster, D. W., 590
Forster, G. H., 1229
Foster, A. L., 150, 581, 1127 1186
Foster, J. L., 1019
Fowler, F. C., 318
Fowler, R. L., 39
Fragen, N., 634, 797
Frain, J. W., 303
Franklin, J. L., 119
Freeman, J. W., 945
Freeman, L. B., 181
French, H. C., 1019
Frenkel, Ya. I., 1353
Frey, F. E., 333, 339, 340, 637
Fridman, I. Ya., 1050
Fritz, J. H., 374
Fröhlick, H., 343
Frosch, A., 1019
Frost, A. V., 479
Frye, A. L., 1313
Funk, I. B., 552

Gabriel, L. G., 1386
Gabriel, V. G., 973, 1203
Gaffney, B. J., 624
Gallagher, J. A., 1227
Galpern, G. D., 129, 494
Ganguly, P. B., 1144
Garrison, A. D., 303, 563, 1019, 1313
Gartin, E. G., 1019
Gaver, K. M., 374
Gear, H. C., 466
Gehm, H. W., 800
George, C. W., 827
Gerling, E. K., 648
Gester, G. C., 864
Getzendaner, F. M., 3
Gibbon, A., 21, 23, 426, 535, 1303
Gibson, C. J., 740
Gibson, J. D., 338
Gilbert, C. L., 835
Gilbert, E. E., 369
Gilg, F. X., 939
Gillespie, B. W., 1293
Gilmont, R., 639
Glicher, S., 606, 838, 1392
Globus, R. L., 481, 482
Gohn, E. J., 1328
Gold, L., 376
Goldfinger, G., 1145
Goldsby, A. E., 336
Goldsmith, D. P. J., 336
Golener, P. M., 1365
Gooderham, W. J., 502
Goodhue, L. D., 596, 850
Goodson, L. B., 331
Gordon, M., 871
Gordon, R. R., 1060
Gorchakov, N. D., 642
Gorin, M. H., 339
Gorokholinskaya, M. S., 144 669
Gothard, N. J., 597
Gough, H. C., 962
Gould, C. N., 979
Grant, C. W., 1
Gray, G. R., 1019
Gray, J. W., 67
Gray, L. R., 61, 472, 580
Grebe, J. J., 563
Green, A. A., 834
Greene, H. H., 303
Gregersen, A., 243, 384
Gregersen, A. I., 221, 259
Gregory, J. N., 1163
Gretzova, E. I., 465
Grib, A. A., 641
Griffiths, F. P., 365

Griggs, T. A., 1313
Groer, I. I., 480
Groote, M. de., 1313
Gross, H. E., 1270
Groves, W., 303
Grummitt, C., 353
Guest, P. G., 354
Gunderson, N. E., 303, 1019
Ginneas, R. C., 329
Gunter, H., 534
Guyer, J. E., 67
Guyod, H., 710, 1288, 1290
Gyani, B. P., 1144

Haas, H. F., 1
Halderson, M. H., 563
Hale, A. B., 657
Hall, R. F., 353
Ham, W. E., 170
Hamer, A. M., 1019
Hamilton, R. M., 60
Hammer, O., 563
Hanson, D. N., 1234
Hanson, G. H., 1147, 1351
Hardenberg, H. J., 211
Hardiman, E. W., 1165
Hardy, C. H., 601
Hare, D. G. C., 1019, 1313
Harkins, W. D., 105
Harper, H. R., 814
Harris, H. M., 1003
Harrison, T. S., 500, 501
Hassler, G. L., 303, 563, 1103
Hatch, G. B., 336
Hatch, L. F., 84
Hathcock, C. D., 1019
Hayes, H. C., 1019
Haynes, C. J., 1313
Hayward, J. T., 1313
Hayward, L. H., 1313
Haywood, P. J. C., 954
Hazzard, R. T., 210
Heck, E. T., 2
Heckman, L. E., 222
Hedberg, H. D., 173
Heiland, C. A., 899
Heigl, J. J., 1019
Heldman, J. D., 94
Hemminger, C. E., 133, 333
Henderson, B., 563
Henderson, L. M., 636
Hennen, R. V., 167
Henny, F., 169
Henry, R. W., 331
Hepp, H. J., 637, 1370
Herold, J. F., 1313
Herzog, G., 1313
Hess, H. A., 36, 1277, 1292
Hesse, C. J., 879
Hetzer, J., 1058
Hewlett, P. S., 1170
Heyman, E., 1146
Hibshman, H. J., 66
Hickel, A. E., 1187, 1364
Hicks, J. F. G., 344
Hickson, B., 600
Hilberath, F., 1238
Hill, W., 1090
Hilton, L. D., 303
Himel, C. M., 104
Hockenyos, G. L., 663
Hodell, L. R., 1019
Hoeffelman, J. M., 660
Hollingsworth, G. P., 373
Holmes, H. H., 563, 1019
Holmes, J. A., 765
Holt, E. C., 650, 651
Holt, P. H., 67
Hooley, J. G., 344
Horton, C. W., 880, 1102
Horton, F., 336
Hottel, H. C., 778
Houghton, A. A., 357
Howat, D. D., 1180, 1181, 1182
Howell, L. G., 563
Hoyte, W. N., 233
Huffaker, C. B., 661
Hughes, E. B., 1361
Hughes, E. C., 135, 1382
Hughes, U. B., 211
Hughson, W. G., 138, 139
Hula, S., 817
Hull, R. H., 1374
Hume, G. S., 211, 543
Hunn, S. A., 1372
Hunter, E., 604
Huntington, R. L., 32, 227, 576, 788, 789, 790, 1237
Huppke, W. F., 340
Hurd, C. O., 1234
Hyams, H., 1345
Hyer, R. S., 563
Hyman, J., 374

Imlay, R. W., 163, 883
Indra, M. K., 125, 1063
Ipatieff, V. N., 100, 338, 637
Irwin, J. L., 760
Iverson, J. O., 796
Ives, G. O., 250, 422, 1195

Jackson, J. S., 833, 1083, 1385
Jacobs, T. L., 93, 95
Jahn, E. J., 374
Jahnig, C. E., 1328
Javes, A. R., 1067, 1368
Jencks, P. J., 955
Jennings, W. S., 783
Jenson, P. W., 1313
Jessen, F. W., 27
Johansen, H. C., 1019
Johnson, H. R., 339
Johnson, J. H., 862
Johnson, M. C., 1019
Johnson, T. W., 30
Johnson, W. H., 1347
Johnston, H. W., 104
Johnston, J. D., 1313
Johnston, N., 862, 1298
Jones, O. S., 1312
Jones, P. H., 1019, 1109, 1306
Jones, P. I., 429, 431, 435
Jones, P. J., 440, 442, 444, 447, 553, 554, 555, 732–739, 919, 920, 996–1002
Jones, R. N., 82
Jordan, J. F., 1375
Jura, G., 105

Kadmer, E. H., 1254
Kalb, B. J., 1019
Kalichevsky, V. A., 508, 1252, 1383
Kalitinsky, A., 788
Kammerer, A. W., 563
Kanhofer, E. R., 339, 637
Kantorovich, B. V., 671
Kao, J. Y., 376
Karavaev, N. M., 666
Karge, F., 936, 937
Karpinski, Z., 1162
Katz, D. L., 116, 292, 362, 724, 1111, 1304, 1350
Kauffman, D. S., 563, 1019
Kavanagh, F. W., 135
Kay, J., 954
Kazakov, E. I., 145
Kazanskii, B. A., 475, 787
Kazarnovskaia, B. E., 202
Keaya, J. L., 80
Keller, R. N., 348
Kellum, L. B., 178
Kelly, A. E., 1344
Kelton, F. C., Jr., 303
Kemler, E. N., 31, 35, 37, 420, 425, 616
Kemp, L. C., 336
Kennedy, W. Q., 375
Kents, P., 845
Kettenburg, R. J., 906, 1280
Khotuntzev, L. L., 1057
Kimhel, T. H., 478
Kimmell, G. O., 1313
King, H. H., 1193
King, J. G., 238
Kinley, M. M., 740, 1313
Kirk, J. H., 372
Kirkbride, C. G., 226
Kirsheman, L. R., 325
Kleinzeller, A., 356
Klimov, B. K., 669, 675
Knibb, K. V., 146
Knipling, E. F., 1168
Knorre, G. F., 1240
Kobeko, P. P., 1352, 1381
Koch, H., 75, 489
Koester, E. A., 211
Komarewsky, V. I., 347, 805, 1084, 1335
Konstantinov, A. A., 1055
Kooistra, L. F., 1124
Koppers, H., 366
Korotkevich, N. N., 1260
Korpi, K., 339
Korpi, K. J., 67
Kostainsek, V. M., 135
Kozacik, A. P., 374
Krasnow, S., 1313
Kroch, E., 1086
Kroenig, W., 67
Kroll, A. E., 798
Kruim, K. S., 493
Kubista, W. R., 24
Kulakov, N. M., 1265
Kunkel, J. H., 69, 236, 470, 943, 1139, 1329, 1331
Kuong, J., 1236
Kurshinskii, E. V., 1352
Kusakov, M. M., 493, 656, 1053 1057
Kyrides, L. P., 110
Kyrnine, P. D., 532

Lacey, W. N., 1348
LaFleiche, P., 1196
Lahee, F. H., 199, 866, 974
Lahiri, A., 1162
Laird, H. C., 1313
Landes, K. K., 176
Langdon, W. M., 1369
Lanin, V. A., 144, 667, 669
Lanze, H. C., 303
Larchar, A. W., 67
Larian, M. G., 1034
Larin, A. Ya., 630, 1043
Larsen, D. H., 303
Larsen, R. M., 126, 211
Lassiat, R. C., 792
Lavrent'eva, E. M., 465
Lawrence, A. S. C., 1166
Lawrence, J. S., 984
Lawrence, R. R., 1313
Lawson, W. E., 563, 1019
Layne, L. A., 303
Leavenworth, P. B., 211
Lee, E. G., 333
Lees, G. M., 890
Leffingwell, G., 286
Lehmann, S., 303
Lehnard, P. J., 284, 1300, 1313
Lel'chuk, S. L., 480
Leman, A. L., 563
Lemmen, W. E., 1128
Lesser, M. A., 286
Leverett, M. C., 1019
Levey, C. D., 373
Levina, M. I., 647
Lewis, W. B., 1204
Liberman, A. L., 787
Lieber, E., 135
Liesaler, L. R., 563
Liljenstein, G. M., 503
Limar, V. K., 1151
Linquist, A. W., 1168
Lippman, A., 799
Lloyd, S., 537
Lloyd, S. J., 679
Lobdell, P., 70
Lochte, H. C., 89
Loeffler, J. E., 297, 423, 430, 432

Logan, D. M., 915
Logan, K. H., 320, 774
Logan, L. J., 186, 244, 261, 539, 694, 695, 698, 975, 1091, 1197, 1273
Lohman, K. E., 7
Longwell, C. R., 172
Loop, V. K., 1266
Lopata, S. L., 779
Loustaunau, J. J., 808
Love, F. H., 228, 775
Lovell, R. G., 241
Loxinskii, D. Z., 1216
Lu, C. S., 346
Lubman, N. M., 674
Lucas, J. E., 1019
Luchinskii, G. P., 1231
Luger, K. E., 1125
Lund, P. H., 676
Lykkon, L., 1243
Lynch, C. C., 83
Lynd, W. E., 1019
Lyons, E. J., 1036

Maass, R., 578, 795
Mabbatt, F. S., 583
Mair, B. J., 1359
Mamedli, M. G., 476
Mapstone, G. E., 1177
Mardles, E. W. J., 1162
Margosches, K. G., 1071
Mark, H., 108, 1145
Martens, J. H. C., 165, 166
Martin, H. Z., 1328
Marvel, C. S., 104
Mason, J. C., 563
Mastin, T. W., 104
Mateer, G. L., 70
Mattox, W. J., 334
Mauldin, J. L., 1313
Mauney, S. F., 124
Mayer, N., 826
Mayland, B. J., 818
Mayo, F. R., 109
Medford, J., 405, 1287
Medveda, L. I., 465
Meier, J. W., 104
Melent'eva, N. V., 1085
Mellors, J. W., 951
Menaul, P. L., 428
Mendius, W., 1140
Men'shikov, F., 73 A
Mercier, V. J., 995
Merill, G. S., 373
Merritt, J. W., 15
Merryman, L. R., 911, 1004
Merten, E., 563
Meot, J. de, 1269
Meyer, C. A., 383
Meyer, W. B., 802
Meyer, W. G., 182
Midwinter, E. L., 854
Mihram, R. G., 1010
Mikhailova, 73 A
Miller, B., 1073
Miller, F. L., 371, 592
Miller, G., 303
Miller, H. C., 1019
Miller, I. A., 563, 1313
Miller, L. G., 1313
Miller, M. C., 221
Miller, O. N., 336
Miller, R. Du Wayne, 1019
Miller, V. A., 1357
Miller, W. J., 303
Millikan, C. V., 1295, 1313
Millington, J. W., 1313
Mills, K. N., 302
Miner, K. H., 1011
Miser, H. D., 161
Mitchell, A. J., 820
Mitchell, R. G., 1372
Moir, H. L., 657
Mokievskii, V. B., 1232
Monson, L. T., 57
Montgomery, J. V., 331
Moon, J., 550, 993
Moore, A. C., 84
Moore, H., 528
Moore, P. H., 1161
Moore, T. V., 1019
Morey, D. R., 1235
Morgan, 740
Morgans, M., 103
Moriarty, F. C., 339
Morrell, S. A., 98
Morris, B., 73
Morrison, W. H., 19
Morse, R. E., 365
Morse, W. C., 538
Morton, F., 232, 1072
Morgan, T. D., 231
Moser, J., 303
Moshchinskaya, N. K., 481, 482
Moss, P. H., 135
Mougey, H. C., 1156
Moullin, E. B., 342
Moulton, R. W., 820, 1266
Mounce, W. D., 1313
Mueller, G. P., 90
Muffly, G., 1019
Mukherjee, J. N., 125, 1063
Mullane, J. J., 1019
Mummery, N. H., 589
Munn, J. E., 1019
Murphree, E. V., 477, 1328
Murphy, M. T., 97
Murphy, T. S., 811
Murray, M. J., 99
Muskat, M., 718, 268, 1019
Muzzy, D. S., 1019

McAfee, A. M., 330
McCormick, R. L., 441, 445
McCuaig, D. W., 607
McCurdy, J. L., 116
McCutchin, J. A., 1110
McFaddin, D. E., 225
McFarlan, A. C., 181
McGee, D., 246
McGivern, P. V., 904, 1019
McGlothlin, T., 174
McGovern, E. R., 850
McGrane, F. B., 660
MacGregor, A. G., 1262
McKinsey, M. H., 1313
McIntire, O. R., 607
Maclean, A. D., 1394
Maclean, M. E., 955
McLellan, C. R., 86
McMillan, W. G., 93
MacMullin, R. B., 1030
McNab, J. G., 135
McNamara, J. J., 1313
McNamara, T. L., 636
MacNeil, F. S., 865
Macpherson, E. O., 138, 139
Macready, G. A., 1313
McTee, A. H., 275

Nagle, R. E., 335, 336
Naldus, H., 1145
Namethkin, S. S., 505, 629, 665, 675, 840, 1044
Nason, H. K., 1154
Nation, C. S., 1019
Nelson, D. M., 956
Nelson, V. E., 181
Nelson, W. L., 56, 58, 320, 363, 364, 654, 1130, 1131, 1148, 1155, 1326
Neufeld, J., 1313
Neuhaus, R., 1039
Nevill, G. E., 563, 1019
Newton, R. H., 1137
Nicholson, A. J. C., 360
Nickle, C. O., 618, 620
Nielsen, R. F., 1108
Nifontoval, S. S., 505
Nightingale, D. V., 352
Nikolaev, A. F., 479
Nikolaev, A. G., 492
Nill, E. A., 372
Nisbet, H. B., 1241
Nissan, A. H., 1165
Noble, W. B., 303
Norman, H. S., 743
North Texas Geological Society, 211
Nudenberg, W., 85
Nutter, 563

Oak, D. P., 1019
Oakes, W. G., 604
Oberfell, G. G., 529
O'Donnell, J. P., 332
O'Kelly, A. A., 336
O'Leary, C. M., 1019
Olive, T. R., 65
O'Loughlin, J. F., 657
Olsden, J. F., 1036
Oppenheim, V., 888
Orchin, M., 88
Orelup, G. W., 132
Osmun, F. N., 1019
Ospina, E., 930
Oswin, C. R., 359, 1238
Othmer, D. F., 115
Otis, H. C., 1313
Otis, R. M., 303
Owen, J. A., 633
Owen, W. L., 563
Owen, Jr., W. L., 563

Paddleford, J. T., 191
Page, J. M., 339
Panchenkov, G. M., 1048, 1049
Pardee, W. A., 143
Parker, A., 1391
Parker, F. D., 792
Parker, F. S., 243, 384
Parker, L. F. C., 1244, 1245
Parker, R., 1363
Parkin, E. A., 834, 1170
Parks, T. D., 958
Parriah, P. E., 563
Parsons, P. W., 624
Parsons, R. L., 1104
Partridge, E. P., 1019, 1313
Paterson, E. V., 512
Patrick, G., 649
Patterson, R. F., 80
Patton, B. L., 663
Paul, P. L., 635
Pearse, S. L., 731, 1296
Pease, R. N., 1356
Peisakhodina, S. L., 1075
Pecot, G. B., 303
Perry, E. S., 6
Peterkin, A. G., 333
Peterson, S. F., 560
Pethrick, S. R., 1153
Petrov, A. D., 120, 230, 1167
Pettibone, E. E., 1330
Pevere, E. F., 336, 340
Pew, J. E., 825
Peyton, G., 533
Phillips, R. A., 563
Phipps, J. T., 1019
Pfann, H. F., 108
Pfister, R. J., 441, 445
Piazza, J., 575, 577, 586
Piganiol, M., 1076
Pignocco, J. M., 1355
Pines, H., 100, 634
Pinkevich, Yu. A., 1052, 1064, 1150
Pirson, S. J., 701, 1192
Pitzer, K. S., 949, 952
Plummer, F. B., 128, 148
Poettmann, F. H., 1350
Polly, O. L., 331
Polonbarinova-Kochina, P. J., 201, 202
Polunina, E. F., 142
Pomeroy, R., 38, 1313
Porter, W. W., 211
Potts, W. H., 1169
Powell, H., 1060
Power, H. H., 1112
Powers, E. C., 1320

Pratt, W. E., 860
Pressman, D., 96
Price, C. C., 90
Price, E. F., 1019
Profft, E., 847
Pronina, M. V., 667
Prosen, E. J., 490, 639, 640, 818, 949, 950, 952, 1347
Prutton, C. F., 372
Pryor, C. C., 26, 207, 208, 298, 413, 436
Putzillo, G. V., 658
Pye, W. D., 175
Pyre, A., 173

Quayle, O. R., 106

Ralph, H. D., 856
Ramaiya, K. S., 1079, 1258
Ramey, M. L., 1313
Rands, R. D., 1349
Ravich, G. B., 1233
Raymond, E. F., 303
Rebinder, P. A., 1232
Rector, L. L., 303
Reed, C. E., 1019
Reed, P., 547, 549, 717, 987, 1009
Reed, R. M., 1389
Reeves, E. D., 67
Rehberg, C. E., 351
Reiff, O. M., 374, 657
Reistle, Jr., C. E., 1019
Remy, T. P., 632
Rendel, T. B., 1160
Reuter, R., 657, 1175
Reynolds, J. M., 740
Rhodes, W. W., 593
Ribner, H. S., 563
Rice, F. O., 97
Rice, P. L., 661
Richards, A. R., 232, 1072
Richards, R. B., 672
Richardson, S. A., 594
Richey, J. E., 375
Ridgeway, C. M., 631
Ridgway, R. S., 1027
Ridley, C., 527
Riesz, C. H., 1335
Riise, J. A., 1313
Risbey, J., 1241
Roark, R. C., 154
Roberts, J. D., 93
Roberts, O. D., 67
Roberts, S. M., 135
Robichaux, S., 740
Robinson, E. A., 374
Robinson, M. P., 1318
Robinson, R. C., 370
Robinson, Jr., W. W., 1019
Roe, E. J., 1313
Roehner, T. G., 370
Rogers, F. T., Jr., 1102
Romanoff, M., 320, 935
Rook, C. G., 1319
Rosenberg, L. M., 629, 1044
Rosenbusch, R., 1363
Rossini, F. D., 121, 122, 490, 584, 639, 640, 818, 949, 950, 952, 1347, 1355
Rossman, A. M., 740
Rouse, J. T., 180
Rouy, A. L. M., 652
Rowsey, L. B., 1019
Royds, J. S., 204
Rozengart, M. L., 475
Rush, J. S., 783
Russell, G. F., 1007, 1250
Rust, W. M., 897
Ryan, P., 804
Rzasa, M. J., 1111, 1304

Sage, B. H., 1348
Sage, J. F., 725
Salley, D. J., 108
Sandenburgh, G. H., 373
Sanders, C. S., 1313
Sanders, V., 964
Sanin, P. I., 505, 658
Saurenman, D. F., 1019
Savage, F. C., 508
Sawdon, W. A., 17, 40, 245, 267, 278, 299, 305, 308, 412, 702, 992, 1096
Sawyer, R. L., 70
Schaad, R. E., 78, 100
Schaufelberger, W. M., 503
Scheurmann, L. N., 308
Scherbatskoy, S. A., 1313
Schillinger, W. A., 1019
Schlumberger, M., 563, 740
Schmerling, L., 338, 637
Schmidl, A. J., 339
Schmieder, F. R., 906, 1280
Schnurmann, R., 1358
Schoch, E. P., 664
Schoessow, G. J., 1124
Schomaker, V., 91
Schonberg, J. R., 73
Schroeder, H. O., 1168
Schukin, V. I., 1167
Schulze, W. A., 328
Schutt, H. C., 1327
Schwint, I. A., 635
Scott, F. L., 740
Scott, R. B., 951, 1349
Scovill, W. E., 1382
Scoville, L. P., 336
Searles, S., 95
Sefton, R., 1246
Seismograph Service Corporation of Delaware, 684, 685
Semenido, E. G., 1255
Serebrennikova, A. G., 665
Serinis, N. S., 1065
Seyer, W. F., 80
Shaffer, D. U., 303
Shand, W., Jr., 91, 347
Shanley, J. J., 1313
Shanley, W. B., 73
Shaw, S. F., 1305
Shaw, T. C., 810
Sheinman, A. B., 628
Sheppard, C. W., 896
Sherbourne, J. E., 1109, 1306
Sheridan, J., 113
Shiras, R. N., 625
Shishkin, N. I., 1352, 1391
Short, E. H., Jr., 273, 380, 407, 410, 433, 443, 447, 704, 713, 722, 905, 1017, 1018, 1099, 1213
Showalte, H. J., 938
Shreve, R. N. 1031
Shukin, N. I., 643
Sidorov, V. G., 1151
Silverman, D., 740, 1313
Simons, H. F., 18, 269
Simpson, A. C., 525
Simpson, T. P., 1137, 1138
Simpson, W., 491
Sivertzev, A. F., 1050
Skinner, B., 1333
Skipton, J. K., 638
Skofield, L. M., 365
Slade, R., 810
Sleven, A., 651
Slipcevich, C. M., 724
Sloan, J. P., 1313
Sloss, L. L., 6
Smith, A. K., 372
Smith, D. A., 1236
Smith, D. E., 1370
Smith, F. L., 1253
Smith, L. F., 1313
Smith, L. L., 1313
Smith, M. L., 1147
Smith, P. A. S., 348
Smith, T. O., 563
Smith, W. G. L., 1313
Smoley, E. R., 1136
Sneddon, R., 1303
Snow, R. D., 340
Sojourner, W. C., 33
Sonders, M., 625
Soroos, H., 103
Southcombe, J. E., 509
Southwell, C. A. P., 1020
Spang, F. J., 1313
Spencer, W. D., 147
Spice, W. H., Jr., 211
Spies, J. W., 349
Spink, L. K., 582, 806, 807
Sprecher, W., 740
Spring, F. S., 68
Squires, F., 729
Stadtherr, J. J., 784
Stahly, E. E., 633, 1142
Staley, F. R., 1142, 1342, 1343
Standefer, R. B., 303
Steinetz, E. W., 131, 591, 830, 831, 1082, 1384
Stekoll, M., 1205
Stenett, E., 1279, 1283
Stenzel, H. B., 879
Stenhagen, E., 102
Stephenson, C. C., 344
Stephenson, E. A., 1313
Sterbutzel, G. A., 1247
Sterligov, O. D., 787
Sterrett, E., 266, 546, 709, 1214
Stevenson, E. H., 99
Stewart, J. S., 761
Stewart, W. H., 1313
Still, J. E., 358, 821
Stitt, J. R., 209
Stockman, L. P., 258, 271, 272, 689
Stokoe, E., 1047
Stoddard, A. D., 303
Stome, J. B., 303
Stossel, E., 1387, 1388
Strafford, N., 361, 1360
Streiff, A. J., 121
Stuart, A. H., 158, 942, 1068, 1315
Stuart, R. W., 1019
Stucker, J. B., 372
Stull, A., 376
Sub-Committee No. 1, 1064
Sub-Committee No. 3, 1062
Sub-Committee No. 5, 1070
Sub-Committee No. 11, 1087
Sub-Committee No. 46, New York Paint & Varnish Production Club, 608
Suen, T. J., 1042
Sullivan, R. J., 1313
Suter, C. M., 345
Sutherland, R. E., 796
Sutton, C., 200
Swain, F. M., 183
Swanson, R. A., 372
Sweeney, W. J., 587
Sweetland, L. B., 1060
Sweetman, H. L., 235
Swift, G., 1313
Swigart, T. E., 319
Sylvester, N. D., 1361

Tabor, D., 1163, 1164
Tägtström, B., 102
Tallaferro, N. L., 179, 1019
Tamblyn, J. W., 1235
Tananaev, I. V., 647
Tannich, R. E., 626
Tanzola, W. A., 574
Tarmanyan, C. S., 1075
Taylor, E. G., Jr., 563
Taylor, F. B., 281. 285, 716, 723, 923
Taylor, L., 59
Taylor, J. B., 1339
Taylor, R. G., Jr., 303, 563, 1313
Taylor, W. J. 122, 1355
Teichmann, C. F., 563
Teneva, R., 505
Terrell, C. F., 1307
Thacker, C. M., 631
Thayer, S., 467
Thiel, B. C., 1323

Thimm, J. E., 1188
Thomas, C. L., 333
Thomas, E. D., 89
Thomas, R. W., 529
Thomas, W. D., 135, 372
Thompson, H. W., 487, 488
Thompson, P. K., 965
Thompson, R., 1007
Thomson, G. H., 234
Thornton, D. P., 959
Thurston, E. F., 499
Timmis, L. B., 953
Tishkova, V. N., 1080
Titov, N. G., 495, 645
Titus, H. L., 364
Todd, J. D., 1194
Tomlinson, C. W., 204
Tongberg, C. O., 631
Tooke, S. W., 824
Torkington, P., 487, 488
Totn, F. J., 563
Treffler, A., 512, 513
Trim, A. R., 356
Troupe, D. F., 740
Truce, W. E., 345
Truesdell, P., 1128
Truitt, P., 89
Trusty, A. W., 511, 812
Turechek, G. F., 1313
Turner, C. F., 72
Turner, F. E., 879
Turner, T. L., 424
Tutschulte, A. C., 1302
Tuttle, R. B., 627, 1127, 1314
Tyson, C. W., 631, 1328
Tzitron, I. L., 659
Tzuiba, A. N., 628

Underwood, A. J. V., 1041
Ungnade, H. F., 352
Uren, L. C., 1313
Ushakov, S. N., 465

Valby, E. P., 559, 730, 1207, 1299, 1340
Val'dman, V. L., 507
Vance, F. P., 1007
Vanderbilt, B. M., 333
Vanderplank, F. L., 1169
Van Driest, E. R., 1121
Van Wingen, N., 28, 559, 730, 910, 1298, 1299
Varentzov, V. P., 1054
Vaskevich, D. N., 480
Velikovskii, D. S., 1051, 1056, 1249, 1380
Verheul, M. M., 1313
Vietti, W. V., 563
Villiers, T. E. de, 372
Villines, E. S. J., 561
Vinson, C., 452
Viscosity Panel Sub-Committee 6—Lubricants, 1149
Vittikh, M. V., 230
Volarovich, M. P., 507
Voorhees, V., 1019
Vozzinakaya, Z., 1257

Waddill, P. M., 579
Wade, H. N., 803
Waggener, K. E., 1313
Wagner, C. R., 631
Walden, J. L., 1191
Walker, C. L., 563, 1313
Wallace, T. H., 29
Wallace, W. E., 875
Wang, S. N., 346
Ward, A. G., 360
Ward, J. L., 406
Ware, C., 740
Warner, A. J., 1178
Warren, G. N., 1037
Warren, J. B., 1313
Warren, R., 563
Warrick, H. R., 67
Wartheim, J., 365
Warthin, Jr., 874
Watkins, J. C., 229
Webber, M. W., 123, 828, 829, 1081
Weber, M., Jr., 1030
Weems, G. S., 797, 337
Weil, B. H., 968
Weil-Malherbe, H., 485, 486
Weinrich, W., 143
Weiss, J., 485, 486
Weiss, J. M., 595
Weiss, W. J., 563
Weinsky, I. H., 339
Weller, J. M., 894, 895
Wells, N. C., 925, 1098
Welty, A. B., Jr., 74
Wendeln, O. B., 1040, 1189
West, T. F., 379
Westfall, C. H., 1291
Whatley, W. W., 1313
Whincup, S., 1358
White, R. R., 1228, 1236, 1325
Whiteley, B. W., 62, 63, 327
Whitson, J., 104
Whittier, W. A., 372
Wickham, H. P., 1332
Wiebe, R., 130
Wiedeking, K., 75
Wilde, E. D., 1313
Wilkinson, E. R., 1322
Willcox, O. W., 859
Williams, A. E., 844
Williams, E. B., 1313
Williams, M,. 1019
Williams, N., 276, 280, 288, 289, 416, 418, 548, 703, 714, 715, 876, 909, 922, 976, 985, 1100, 1106
Williams, N. L., 657
Williamson, H. V., 815
Willingham, C. B., 584
Willson, C. O., 1223
Wilson, R. E., 526
Wilson, W. A., 1266
Wilson, W. W., 303
Wineman, W. H., 1313
Winning, C., 135
Winstow, C. C., 563
Winter, N. B., 211
Winterburn, R., 1310
Wise, D. H., 1019
Withney, S. H., 972
Wolcott, P. B., 171
Wood, J. T., 1313
Woodring, W. P., 7
Woods, R. W., 718
Woodward, R. R., 92
Woolslayer, H. J., 1313
Worden, R., 376
Works, M. T., 16
Wormer, C. W. van, 303
Wright, K. A., 1313
Wrightsman, G. G., 1019, 1313
Wyatt, P. F., 1360
Wyckoff, R. D., 898

Yancy, J. R., 563
Yao, F. H., 1042
Yoffe, A., 1146
Yost, L., 303
Young, D. W., 101
Young, J., 1313
Young, W. G., 96
Yuster, S. T., 551, 557, 558, 917, 918, 1014, 1108

Zaba, J., 279
Zabavin, V. I., 504
Zacher, W. B., 994, 1282, 1313
Zagrebel'naya, V. S., 1263
Zaks, S. L., 619
Zherdeva, L. G., 1257
Zimmerman, G. B., 67
Zimmerman, J., Jr., 872
Zimmerman, R. D., 1019
Zobell, C. E., 1
Zublin, J. A., 1019
Zvorykina, V. K., 840

ABSTRACTS SUBJECT INDEX.

Numbers refer to Abstract Numbers. (P) denotes Abstract of Patent Specification.

Absorption Spectra, 114
Acetylene :
  chemistry of catalytic hydropolymerization, 120
  phosphine and hydrogen sulphide determination, 1362
Acetylenic Ethers :
  dielectric constants and dipole moments, 93
  hydration, 95
Acid Wastes, neutralization, up-flow, 800
Acids :
  cresylic, from petroleum, 1261
  fatty ; fat determination, 1361
    from petroleum, 603
    lubrication of metal surfaces, 1163
    mixed indicator in titration of, 356
    synthesis, 855
    viscosity, 1233
  naphthenic, removal and recovery from mineral oils (P), 78
  tar, determination of in coal products, 500
Acrylonitrile, spectra of, 488
Adsorption Processes (P), 330
Air Streams, high velocity, temperature measurements, 778
Alabama, geology, 537
Alaska :
  drilling problems, 1293
  exploration of seepages, 184
  oil investigations, 683
Alcohol :
  industrial, 844
  use in motor fuels, 131
Alcohol–Air Mixtures, Mollier Diagrams for, 130
Alcohol–Hydrocarbon Mixtures, n-butanol as stabilizer, 586
Aldehydes, preparation from synthetic rubber by-products, 73
Alkathene, properties and uses, 604
n-Alkyl Acrylates, preparation and properties, 351
1-n-Alkyl-*cyclo*pentanols, preparation and properties, 86
Alkyl Sulphites, preparation, 110
Alkylation :
  1140
  hydrogen fluoride catalyst, 68
  processes (P), 70, 336, 633
  Socony–Vacuum unit, 69
Alloys, Bearing, frictional properties of, 1164
Allyl Alcohol, manufacture, 1176
Allyl Chloride, manufacture, 1176
America, Central, Cretaceous formations, 883
America, Latin, developments in 1945, 758
Anthracene :
  determination in tar and tar-oil fractions, 361
  hydrogenation by tetralin, 88
Argentina :
  Buenos Aires, geophysical exploration in, 396
  Comodoro Rivadavia Field, wildcat, 188
  production, 450, 1115
  Tupungata oilfield, 884
Arizona, oil and gas prospects, 676
Arkansas :
  Moorefield formation, 871
  reserves, 870
  South, developments, 210
Asphalt :
  Putilov, analysis, 658
  Sadkin, synthetic fuel from, 659
Asphalt Laminated Paper, protective value, 235
Asphaltenes, origin of in Perm crude oil, 504
Asphaltic Residues, hardening (P), 373
Australia :
  oil shale developments, 668, 960
  post-war oil search plans, 389

Bahrein, developments, 573
Bearings :
  sleeve, alternating loads on, 832
  water-cooled, corrosion, 158
Benzene :
  from toluole, 650
  heat of combustion, 639
  reaction with butadiene, 100
Benzol, styrene from, 666
Bitumen, Asphaltic :
  historical survey, 833
  manufacture, 1083
  soil stabilization tests, 1386
  use in road construction, 1385
  viscosity, 1260
Boiler Scale, silica and magnesia in, 499
Bolivia :
  exploration, 541
  production, 461, 1116
Borneo, production by Japanese, 1120
Brazil :
  geology, 888
  oil search, 1273
Butadiene :
  from oxygen derivatives of hydrocarbons, 817
  manufacture (P), 1334
  physical and chemical properties, 1174
  reaction with benzene, 100
  storage, 777

1 : 3-Butadiene :
heats of formation and combustion, 640
specific heat, 951
thermodynamic properties, 1349
Butane, dehydrogenation by Houdry process, 792
Butane, isomerization, 796
*iso*Butane, composition determination, 824
n-Butane–Methyl Bromide System, azeotrope in, 94
n-Butanol, stabilizer for alcohol–hydrocarbon mixtures, 586
iso-Butenes :
polymerization, 475
preparation (P), 78
specific heat, 951
n-Butenes, preparation (P), 78
iso-Butylene, storage, 777
2 : 3-Butylene Glycols, configuration, 98

California :
Chico Martinez Creek area stratigraphy, 160
deeper production possibilities, 243
developments, 211, 259
Richfield, water-flooding, 1306
Santa Lucia Range, Cretaceous and Paleocene, 179
Tumey sandstone, 872
Wilmington, multi-zone production, 1310
Canada :
Alberta, bituminous sands, 1198
developments, 760
Jumping Pound, 398, 681
Turner Valley, gas repressuring, 1110
Cretaceous formations, 543
Maritime Provinces, 618
Norman Wells field, 50, 761
Northwest, developments, 544
Nova Scotia, 190, 395, 399
oil situation, 306
potential oil area, 620
Prince Edward Island wildcat, 248
refineries, 786
Saskatchewan, exploration, 192
1943 developments, 211
Carbon Black, from pitch, 843
Carbon–Dioxide–Paraffin Systems, phase behaviour of, 1350
Carbon Tetrachloride, thermal data, 344
Castor Oil, iodine value determination, 1363
Catalysts, preparation (P), 339
Chemicals :
from petroleum, 839
from petroleum, U.S. output, 520
use in petroleum industry, 1175
Chlorinated Compounds, extreme pressure lubricating properties, 1077
Chile, wildcats, 14, 189
China :
fuels from vegetable oils, 653
oil possibilities, 388, 690
reserves, 48
Chloral, Brothman continuous process for manufacture of, 77
3-Chloro-2-propen-1-ol, dehydrochlorination, 84
Coal :
fluorine in, 483, 484
gasification, 670, 671
production and use, 1391
thermal solution, 1085, 1263
underground gas generation, 670
utilization, 237, 238
West Siberian, motor fuel from, 669
wetting with hydrocarbon liquid, 1264
Coal–Oil Suspensions, viscosity, 1057
Coal Tar, developments, 234
Coal-to-Oil Conversion, science of, 147
Colloidal Fuel, 523
Colombia :
Barco production, 687, 886
Chafunay test, 1089
completions, 314
discoveries, 247
exploration, 245, 930
Magdalena, Cantagallo extension test, 980, 1199
production, 44, 53, 310, 460, 570, 571, 764, 931, 1023, 1024
Socuavo, 569
Tres Bocas field, 763
wildcat, 9, 265
Colorado, Rangely field development, 927
Compressor, gas compressibility effect on performance, 1027
Concrete, gasoline proofing, 465
Core Making, petroleum extracts in, 599
Corrosion :
electrolytic, 323
measurement, 1068
prevention, American materials, 594
See also Pipelines and Refinery Plant.
Corrosion Inhibitor, preparation (P), 374
Cracking :
butylene yield tripled by deeper cracking, 474
catalytic, for manufacture of 100 O.N. gasoline, 1135
cycloversion process, 1333
feed stock, propane deasphalting of, 791
fluid catalytic, 1328, 1329, 1332
fuel oil, catalytic, 630
Houdry process, 627, 792, 947, 1134, 1330
Latin American crude oils, 506, 585, 946
oxidative, vapour-phase, 628, 629
processes (P), 67, 333, 631
thermal, conversion to cycloversion, 579
Thermofor process, 332, 947, 1136–1138, 1331, 1344
Cracking Plant :
conversion of, 1128
tubes, failure of 18 Cr–8 Ni, 945

Crankcase Oil Analysis, 956
Crude Oil :
aromatic base, 364
Bernstein Field, Trinidad, 232
classification, 1071
Cumarebo, Venezuela, 127
differentiation method, 125
evaluation curves for, 654
paraffin base, 363
precipitation of asphalt from, 292, 362
properties and characteristics, 128
Rocky Mountain types, 126
Trinidad, analysis, 1072
West Texas sour, processing of, 580
Cuba :
drilling, 187, 688
Jarahueca Field, 251, 1118
Tatibonico discovery, 1201
Cutting Oils, 590
emulsifiers for, 142
Cyclopropane–Propylene Mixtures, analysis, 1356

D.D.T. : 379
Brothman continuous process for manufacture of, 77
insecticidal action, 1171
residual films of, 834
Decalin, oxidative cracking, 1044
Density Pipette, 360
Dermatitis, industrial, prevention, 589
Detergent, Teepol X, 518
Detergent Agents, fundamentals of, 1058
Detonation :
alcohol–water injection as depressant, 1376
parameters of detonating waves, 641
1 : 2 : 3 : 4-Dibenzphenanthrene, synthesis, 81
1 : 2-Dichloro*cyclo*hexane, reaction with anisole, 90
3 : 4-Dichlorohexane, reaction with anisole, 90
2 : 4-Dichlorphenoxy Acetic Acid, weed killer, 611
Diesel Oil, from Fischer–Tropsch process, 507
2 : 3-Dihydroxypropyl *n*-Dodecyl Ether, preparation and properties, 353
Diphenylamine, estimation of, 646
Di*iso*propyl Zinc, preparation, 103
Di-*s*-butyl zinc, preparation, 103
Dioxane–Benzene–Water System, properties, 83
Diphenylmethane, production of, 481, 482
Dipyrrolpyridones, structure, 350
Distillates, sulphur content estimation, 1067
Distillation :
butadiene separation (P), 329
fractionation, 64, 226, 227
in concentric rings, 577
unit operation, 576
molecular, 65
process (P), 625
Distillation Curves, correlation with T.B.P. curves, 1155
Dominica, wildcat abandoned, 889
Drilling :
blowouts, causes and prevention, 16
British practice, 707
butane fuel system, 269
casing, failures, 906
methods, 992
world's longest string set, 905
cementation (P), 1019
classification, 199
clay suspensions, viscosity reduction, 1206
coring, diamond-bit, 989
method (P), 1019
sidewall, 1285
with cable tools, 904
cost accounting, 1291
cutting and fishing problems, 1099
deep, abnormal pressures in, 273
control in, 909
record, 546, 711, 1215, 1294
technique in California, 278
directional, 272, 416
drill-pipe stacking, 1279
efficiency by modifications, 987
flow measurement, annular (P), 1313
flushing, rotation of drill-pipe effect on, 1216
horizontal, 17, 271, 1276
in city limits, precautions, 1211
logging, caliper, 1288–1290
method (P), 563, 1313
modern practices, 547, 1207–1209
mud treatment, 412, 414, 545, 994, 1093–1095, 1282–1284
perforation cementing in deep wells, 270
pipe break-off symptoms, 18
pipe freeing (P), 1313
plugging (P), 1313
problems in, 990
radioactivity logging, 995
site provision problems, 548
swamp location preparation, 1100
water supply, conditioning of, 407
well-logging (P), 303
Drilling Contractors, need for in oil industry, 200
Drilling Equipment :
bailer (P), 1313
Bethlehem Gumbo Buster rig, 408
bits (P), 303, 563, 740, 1019, 1313
hardfacing and rebuilding, 1286
Cardwell Model O draw-works, 986
casing, cleaning brush (P), 740
design, 1098
recovery, 1011
tapered, safety factors, 1097
seal (P), 740
shoe, 903, 991
cementing equipment (P), 303, 563, 1313
coring (P), 563, 1313
dead line anchor, 705
depth measurement, 563

Drilling Equipment—*cont.*
derrick (P), 1313
diesel driven, 908
diesel-electric, 1277, 1278
drill pipe, reconditioning (P), 1313
, elevator (P), 740
protector (P), 1313
drilling fluid, 20, (P), 303, 563, 1313
drilling-time recorder, 549
electric rotary drive, 276
elevator (P), 303, 1019, 1313
Emsco J-100 rig, 277
engine foundations, prefabricated, 988
engines, landing craft, 1292
explosive loading in wells (P), 1019
fishing tools, 1287
Frank's truck-mounted rotary rig, 411
fuse, delayed-action (P), 740
gravel washer (P), 303
gun-perforators (P), 303
Hillman–Kelley power tong, 993
Hopper portable rig, 417
hydraulic (P), 563
indicating instruments, 405
jar mechanisms (P), 303, 1019
kelly, runway for, 706
liner hanger (P), 1313
logging (P), 1313
mud pump manifold, 1096
mud pumps, compounded, 1213, 1214
mud weight indicator, 406, 413
orienting apparatus (P), 563, 1019
piston (P), 303
plastic plug-backs, 275
portable, 550, 902
portable, mud-pump suction breakdown, 708
Portable Rig Co.'s rig, 409
radiographic inspection, 410
rig, diesel-powered, automatic control, 985
tall, for deep drilling, 1210
rotary (P), 1019
modern, 415, 1207–1209, 1274, 1275
portable, 703
rotary slips, power-driven, 704
rubber, synthetic, in, 901
side-hole corer (P), 303
side sampler (P), 303
side-tracking (P), 740
spring dog assembly (P), 1019
squeezing tool (P), 1313
swab (P), 563
tong, power-driven, 1212
tool lock (P), 1019
tube supports (P), 303
war shortages, 19
weight control (P), 1313
well measurement (P), 1313
well-screen cleaner (P), 740
well surveying (P), 1313
wellhead (P), 563
whipstock (P), 563
Wilson Super Titan rotary rig, 274
wire line treatment, 709
world's deepest well, 711

Drying Oil from Petroleum, 852
Du Pont de Nemours & Co., research organization, 966

"Eagle" Bottom Sampler, 1372
East Indies :
post-war prospects, 453
sedimentary basins, 893
Ecuador :
oil search, 197, 397, 542, 885
production, 932, 1119
Egypt :
developments, 573, 983
wildcat, 8
Electrical Practice, code for petroleum industry, 1394
Electronics, application to petroleum industry, 1142, 1342, 1343
Emulsions :
crude oil, breaking (P), 1019, 1313
prevention and treatment, 1218
oil-water, production (P), 374
treatment, 714
shale-oil, 1177
Engines :
diesel, design, 1393
ethyl ether for cold starting, 508
fuels for, 1252
gas-turbine problems, 1267
gasoline, developments, 614
internal combustion, conversion to gas, 1268
deposits in, 1162
supercharger developments, 615
3 : 6-Epoxy*cyclo*hexene, preparation, 85
Ester Salts, wetting agent in insecticide, 601
Estonia, shale oil industry, 845
Ethane–Ethylene–Acetylene System, phase equilibria, 116
Ethanol–Water, enthalpy-composition diagram, 1236
Ethyl Alcohol, dehydrogenation, 480
Ethylbenzene, heat of combustion, 639, 951
Ethylene Dibromides, mono-substituted, reaction with potassium iodide, 96
Europe, post-war refinery requirements, 530

Fats, softening point of, 355
Fire Prevention, "Fire Control Index," 341
fire school organization, 229
foam principles, 583
Fischer–Tropsch process, 76, 581, 805, 1045, 1084, 1335
Florida :
Everglades, drilling problems, 418
geology, 534
Flue Gases, dust precipitator, electrostatic, 941
Fluid Flow :
1296, 1299
D'Arcy's law, 737
friction losses, 798

Fluid Flow—*cont.*
orifice meter measurement, 809, 810, 1229, 1338–1340
research, 910
turbulence diffusion, 1121
Fluorine in Coal :
industrial significance of, 484
occurrence of, 483
Fluorochemistry, 1269
"Foamglas," use in petroleum industry, 964
Foaming Agents from Petroleum, 847
Foundries, use of petroleum and coal products in, 136
France :
St. Gaudens, German developments, 387
St. Marcet field, 1090
Furane Resins, 673
Fuel Oil :
blending, 1253
Naval Boiler and Turbine Heater test, 1253
stability tests, 1377

Gas, underground generation, 670
Gas Burners, automatic controls for, 358
Gas Mixtures, analysis, 1247
Gas Oil :
cracked, as burner fuel, 1378
preparation (P), 133
Gas Turbines, 383
Gases :
calorimetry technique, 1240
liquefied petroleum, uses, 531, 965
refinery, central treating plant, 578
viscosity, high-pressure, prediction, 819
Gases and Vapours, flammable, minimum energies for spark ignition of, 354
Gasoline :
aviation, British war-time production, 957
manufacturing processes, 477, 826
quality relation to performance, 587
ethyl blending, automatic, 478
from Sadkin asphalt, 659
inhibitors, microbiological aspects, 1074
Mexican, cracking of, 506
peroxide value determination, 1241
sulphur estimation, 492
synthesis from natural gas, 76
tetraethyl lead removal, 495, 645
vapour, poisoning by, 948
Geochemical Prospecting, 15, 1203
Geophysical Surveying :
apparatus (P), 1019
earth-resistivity measurements, interpretation, 268
electromagnetic, 1204
gravity meter quantity interpretation, 701
interpretation, 897
operations in U.S.A. in 1944, 899

Geophysical Surveying—*cont.*
prospecting in South America, 267
quantitative calculations, case histories and, 700
radioactivity and petroleum genesis, 896
radioactivity measurement, 266, 1092
velocity corrections, 198
world operations in 1944, 900
Georgia, oil and gas prospecting, 533
Germany, chemicals in war-time, 1390
Great Britain :
aviation fuel production in war-time, 957
Ayre Committee report, 971
coal statistics, 970
drilling practice, 707
motor vehicle taxation, 529
oilfields, 215, 890, 1020
pipeline-storage grid, 468, 469
production, 51, 214, 449, 454
Scottish oil shale, 375, 1262
tar products output, 1183

Haiti, wildcat abandoned, 889
Halides, alkyl, liquid phase rearrangement, 109
Helium, production and uses in U.S.A., 655, 680, 1186
Heptene, isomerization, 1167
Hexa-arylethanes, dissociation, 104
Hexachlor*cyclo*hexane, insecticide, 610
*cyclo*Hexenes, substituted, thermal decomposition, 97
*cyclo*Hexene Oxide, reaction with anisole, 90
Hexylene, methylpentane from, 479
Holland, Drente discovery, 1202
Hungary, production, 315
Hydrocarbon Analysis, infra-red spectrophotometer, 644
Hydrocarbon Vapour, chlorinated, detection, and estimation of in air, 953
Hydrocarbons :
adsorption and constitution, 1144
aliphatic branched-chain, catalytic aromatization, 347
alkylbenzenes, heats of combustion and isomerization, 1347
analysis by distillation, 1062
analysis by infra-red absorption, 1060
application of time–temperature freezing and melting curves, 122
aromatic, absorption spectra, 1358
mono-alkyl, from non-alkylated aromatic (P), 637
uses of, 595
diene, determination of, 1061
dispersion measurements, 494
light, physical properties, 1147
octanes, free energies and equilibria of isomerization, 952
heats of isomerization, 818
oxidation products, 840
oxygen derivatives, butadiene from, 817

Hydrocarbons—*cont.*
paraffin, free energies of formation, 949
heats of combustion, 490
heats of formation, 949, 950
isomerization, 797
oxidation, 1387, 1388
synthetic (P), 637
vapour–liquid equilibria, 1351
n-paraffin, density and transition points, 80
petroleum, oxidation by marine micro-organisms, 1
plastics from, 150
polycyclic, fluorescence quenching, 485, 486
properties, calculation, 1355
saturated, from xylole, 651
separation of, 1359
spectrometric analysis, 1239
synthesis (P), 366
synthetic, ultra-violet absorption spectra of, 82
transformation, contact-catalyst, 643
Hydrocarbon Mixtures, determination of individual hydrocarbons in, 121
Hydrocarbon Oils, additive (P), 141
Hydrocarbon Products, preparation (P), 374
Hydrofluoric Acid :
alkylation, safety precautions, 812
fractionation, 795
Hydrogen, from hydrocarbons and steam, 1389
Hydrogen–Acetylene Mixtures, metal-catalyzed reaction, 113
Hydrogenation, processes (P), 334
Hydroxylamine-*o*-Sulphonic Acid, aromatic amination, 348

Illinois :
Bethel sandstone petrology, 175
completion practices, 287
Middle Devonian formations, 874
India :
Joya Mair field, 892
new field, 196
Industrial Works, siting and layout of, 1190
Insecticides :
A.L. 63, 837
aerosol dispersants, 850
aerosols, efficiency, 596, 597, 598
anti-malarial oils, 835
benzene hexachloride, gamma isomer of, 610
concentrated, 1168
contact, 1169
derris root, rotenone content, 961
ester salts as wetting agent, 601
D-D mixture as soil fumigant, 841
D.D.T. thanite spray, 661
epicuticle, 849
flying insects and, 517
for control of red spider mites, 527
new, 154
pest control, oil types in, 662, 663

Insecticides—*cont.*
petroleum oil toxicity, 836
post-war, 593
preparation (P), 374
soil, 962
tar sprays, 1172
toxicity, 1170
Iran :
developments, 573
Qatar Peninsula, 263
Russian negotiations for exploration rights, 253
Isohexane, ternary mixtures, analysis, 1357
Isomerization :
commercial, of lighter paraffins, 337
processes (P), 338, 634

Jacobsen Rearrangement, cyclic hydrocarbons, 107

Kansas :
Arbuckle dolomite, 191
water-flooding, 285
Kentucky, "Corniferous" zone, Irvine, 181
Ketones, rate of cyclization, 87
Kogasin, synthetic lubricants from, 75
Kuwait, developments, 1223, 1224

Laboratories :
mobile, construction and operation, 124
refinery control, 969
Laboratory Equipment :
carbon dioxide and hydrogen generator, 1373
cracking, 1043
distillation column, 1370
backward-fed, 1369
reflux regulator and head, 584
design, 788, 1248
efficiency, 787
helices, 821
take-off, 649
gas flow check by soap-film calibrators, 502
gas heating regulator, 497
spectrophotometer, infra-red, 644
thermometers, 1371
viscometer mounting, 498
Linseed Oil, petroleum substitute for, 599, 608
Liquefied Petroleum Gases, production and use in U.S., 531, 965
Liquid Fuel, from non-petroleum sources, 528
Liquids, dielectric properties, 342, 343
Louisiana :
dense structures, 875
Gulf Coast developments 1943, 211
North, developments, 210
Potash Dome developments, 416
Lubricants :
additives, (P) 135, (P) 372, 828, 829
aviation engine, 371, 592
economy in, 588

Lubricants—*cont.*
evaluation, field tests, 510
lubricating characteristics measurement (P), 652
mechanical properties at low temperatures, 509
oiliness and dipole moment, 1254
preparation (P), 657
selection of, 512, 591
synthesis, 1076
synthetic, manufacture from Kogasin, 75
viscosity, 1380
viscosity, low-temperature, interpretation, 1232
wagon, low-temperature viscosity, 1080
Lubricating Greases :
examination of, 123
improvements, 1081
internal friction, 1056
physical chemistry, 1166
separability characteristics, 370
testing, 959, 1152, 1153
viscosity and consistency, 1364
viscosity and properties of, 1054
Lubricating Oil :
addition agent (P), 657
additive-containing, viscosity variations, 656
aircraft, pumpability, 1075
crankcase oil analysis, 956
deterioration evaluation, 1382
effect of sulphur compounds and peroxides on oxidation, 134
extreme pressure, 1077, 1078
from Ishimbaev crude, 505
heavy duty, detergency or dispersancy in, 827
engine testing, 1379
low viscosity-temperature coefficient, 1381
manufacture, 1383
phosphorus determination, 1243
pressure–viscosity coefficient, 1354
reclaimer (P), 72*a*
refining by contact filtration, 635
regeneration, spontaneous combustion in, 1259
synthetic, 1336
testing, 1156
viscosity at low temperatures, 1051, 1256–1258
viscosity and pumpability, 1151
viscosity as a technical characteristic, 1255
viscosity variation with physical properties, 1079
viscosity–temperature characteristics, 1053
Lubrication :
boundary, behaviour of liquids and additives, 511
kinetic friction measurement, 493
of metal surfaces by fatty acids, 1163
oil-film thickness measurement, 958
problems, current, 1161
vade mecum, 830, 831, 1082, 1384
Measurement of Oil, 1046, 1047, 1345
Mercaptans, aliphatic, determination, 1157
Metals, anti-corrosion composition for, (P), 141
Methane :
British research, 1337
thermodynamic properties, 1348
Methyl Dilinoleate, viscosity, 101
Methylene*cyclo*butane and 1-Methyl-*cyclo*butene, structures, 91
Methylpentane, from hexylene, 479
Mexico :
Cretaceous formations, 883
developments, 759
geology, 684
Northern, geological history, 178
Poza Rica crude, cracking, 585
production, 308, 452
refineries, 786
Michigan :
developments in 1943, 211
Porter Oilfield, 176
Micro-Organisms, marine, oxidation of hydrocarbons by, 1
Micro-Pyknometer, 357
Middle East :
production, 770
reserves, 768, 769
technical oil mission report, 934
Mississippi :
developments, 876, 1195
geology, 174, 1194
Heidelberg field, 1271
production problems, 715
productive areas, 538
Motor Fuels :
additives (P), 132, 369
alcohol fuels, 131
ammonia as, 1086
anti-knock, preparation (P), 336
creosote-petroleum mixtures, 368
future, 159, 968, 1160, 1375
preparation (P), 369
substitute, testing, 1366
Naphthas, petroleum, industrial uses, 513
Natural Gas :
chemicals from, 236, 664, 825, 1073
dehydration, 1250, 1374
Ischimb oilfield, composition, 129
storage underground, 24, 914
sulphur removal, 228
synthetic-liquid fuel from, 1084
use in dehydration of foods, 365
water-vapour determination, 1007
Natural Gasoline :
chemicals from, 236
*iso*butane test, 503
propane recovery, 1159
New Mexico, South-eastern: developments 1943, 211
New South Wales, oil shale production in 1944, 960
New Zealand, oil exploration, 390
Nomenclature, petroleum, 1087

n-Nontriacontane, 102
North Dakota :
  Tertiary geology, 167
  Williston Basin stratigraphy, 168

Octane Rating :
  C.F.R. motor method, improved accuracy, 1069
  calibration of C.F.R. reference fuels, 1070
  extension above 100 O.N., 1367
Octane–Water–Air Mixtures, Mollier Diagrams for, 130
Oil Company Finance, 972
Oil Shale :
  Australian developments, 668, 960
  Central Texas, 148
  Lothians, 375, 1262
  organic substances of, 667
Oklahoma :
  Anadarko Basin, geology, 535
  developments, 1943, 211
  new graptolites, 162
  Spavinaw Granite, 170
  West Edmond Field, 242, 246
Olefinic Systems, α-Methylenic reactivity, 111
Organic Compounds, metals determination, 1360
Organic Liquids, amphiphatic, equilibrium spreading coefficient, 1146

Packing Material, life of, 1238
Paint Materials, properties and uses of, 963
Palm Oil, use in steel industry, 526
Paper, resinous materials in processing, 376, 525
Parachors, organic, 106
Paraffin, liquid, properties, 140
Paraffin Hydrocarbons, dehydrogenation (P), 340
iso-Paraffins, C_{13}–C_{24} Range, synthesis and properties, 230
Paraguay :
  geophysical surveys, 702
  oil search by Union of California, 391, 540
Paving Mixtures, preparation (P), 373, 660
Peat, thermal solution conversion, 846
Peat Suspensions, viscosity, 1265
Peat–Wax, Chatham Island production, 138, 139
Penetron, for measurement of steel thickness, 1143
Pennsylvania, Bradford, water-flooding in, 422
*cyclo*Pentadiene, determination of, 1246
Pentaerythrityl Bromide, debromination by zinc, 99
6 : 6-Pentamethylenefulvene, reaction with maleic anhydride, 92
Pentane, chlorination of, 665
n-Pentane, viscosity, 118
3- and 4-*cyclo*Pentylpyridines, isolation and identification, 89
Perbunan, spectra of, 488
Peru :
  developments, 195, 572, 762, 1222
  production, 457
Petroleum Engineering, education requirements, 1112
Petroleum Fractions, heat content, 1234
Petroleum Geology :
  Alabama, 537
  Anadarko Basin, 535
  California, Chico Martinez Creek, Eocene stratigraphy, 160
  Cretaceous and Paleocene of Santa Lucia Range, 179
  Santa Maria District, straigraphy and palæontology, 7, 169
  Canada, Cretaceous formations, 543
  dip angles, measurement on aerial photographs, 164
  distribution of petroleum in earth's crust, 860
  fault classification, 4, 172
  finding oil, mathematical chances, 973
  Florida, 534
  fluorochemistry in, 1269
  Georgia, 533
  Gulf, Mexican and Caribbean zones, 684
  Gulf Coast, Cotton Valley Beds stratigraphy, 183
  relation of grabens to other faulted troughs, 182
  Gulf Region, Jurassic formations, 163
  Illinois, Bethel sandstone petrology, 175
  Kentucky, " Corniferous " zone, 181
  Mexico, Northern, geologic history, 178
  Michigan, Porter Oilfield, 176
  Mississippi, 174
  North Dakota, Tertiary geology, 167
  oil finding, future of, 532
  Oklahoma, age of Spavinaw Granite, 170
  new graptolites, 162
  Oligocene stratigraphy of S.E. United States, 865
  origin and accumulation, 858
  palæontology and oil search, 862
  palæoecology, 861
  Papua and New Guinea, Tertiary Sequence in, 5
  reservoirs, genetic and morphologic classification, 1192
  source beds and oil search, 859
  South American oil zones, 685
  South Texas, pre-Trinity deposits, 3
  Texas, West Ranch Field, 177
  United States, regional geological studies, 161
  Northern Plains, Big Snowy Group, 6
  Venezuela, fossils from metamorphic rocks, 171
  North-eastern Anzoategui, stratigraphy, 173

Petroleum Geology—*cont.*
Virginia, deep well stratigraphy, 166
West Virginia, deep well stratigraphy, 165
regional metamorphism of coal in, 2
Williston Basin stratigraphy, 168
Petroleum Industry, war-time achievements, 856
Petroleum Products, developments, 609
Petroleum Substitutes, British research on, 149
Phenol and Alkyl Phenol, hydrogenation, 352
Phenyl Ethers, alkylation, 112
Phenols :
alkylated, physical properties, 143
chlorinated, chlorine determination, 954
determination of in coal products, 501
synthesis, 491
Phenylacetylene, infra-red spectrum, 487
Phenylpropylenes, sulphonation, 345
Prins Reaction, 111
Pitch, origin of in Peru crude oil, 504
Pipelines :
contamination by successive flow in, 318
corrosion, economics, 466
protection, 221, 467
soil, 320, 935
design, 936, 937
gas, 222
Johnson coupling, 1123
loading terminal design, 775
post-war uses of war emergency, 319
under English Channel, 1028, 1122
wall thickness relation to life, 774
weld examination, 773
analytical aspects, 524
application to oilfield equipment, 324, 380
polyvinyl, 1184
raw materials for, 1180–1182
Poland, production, 771
Polyisoprenes, ultra-violet absorption spectra, 489
Polyallyl Alcohols, preparation, 382
Polymerization, processes (P), 335, 632
Polymers :
identification, 1244, 1245
molecular weight distribution, 1235
Polystyrene : 612, 853, 1178
multi-cellular form, 607
Polythene, 604, 605, 672, 854
Polyvinyl Chloride, use for prostheses, 381
Printing Ink, rheological and working properties, 1188
Production :
acidizing, 561, 912, (P) 1019
multizone, 1105
spent acid detection, 1010
air drive, explosive mixtures in, 1108
air lift, 1305
apparatus and method (P), 1019, 1313
bailing and washing wells optimum time, 209
Production—*cont.*
bottom-hole pressure data, 448
capillary pressure measurement, 1103
casing repair packer, 925
choke control, 297, 423, 430, 432
completion practice, 1006
completion practices in Illinois, 287
completions, deep well, 26
multiple, 208, 280, 298, 436, 439, 1310
compressors for low-pressure gas wells, 281
condensate recovery by cycling, 1001
condensate volume factor in, 733
connate water determination (P), 303
convection currents in porous medium, 1102
core analysis, 296, 440
corrosion prevention (P), 563
corrosion problems, 27, 30, 428, 716
decline curves analysis, 283
deposit prevention (P), 303
depth records, 1215
displacement factors, 1002
distillate production (P), 563
edge-water influence, 419
electric log characteristics, 444
electric-log data application, 553
electric logging, 710
electric pilot permeability surveys, 284
electrification of Salt Creek Field, 288
equilibrium constants in, 736
flow-rate adjustment (P), 303
fluid-loss prevention (P), 303
fluid movement determination, 731
forecasting, 911, 1004
formation survey methods, 913
gas, Schoch plan, 921
testing, 1219
static pressure gradients, 1111
gas lift, 1302
gas–oil ratio correlation with yield, 727
gas reservoir content (P), 1313
gas viscosity estimation, 996
gravel packing (P), 563, 1019, 1313
gravel-packing technique, 722
gun-perforation for multi-zone control, 29
heaving shale and salt water control, 289
hydraulics of petroleum strata, 201
hydrocarbon physical constants, 554, 555
kick-off for dead well, 1015
lime-completion practice, 1009
log–log chart construction, 31
oil displacement, by gas, 919, 920
by gravity, 997
by water, 738, 739
oil estimates, material–balance calculations, 718
oil recovery by expansion, 1000
oil samples, subsurface, analysis of, 1003
oil volume factor in, 734, 735
oilfield maintenance, 1312
paraffin control by hot oil, 923

Production—*cont.*
paraffin removal, 282
permeabilities of sands, 1104
permeability determination, 732 (P), 1313
phase-diagrams utility, 32
porosity, voids and surface area, 429
pressure maintenance, 203
productivity index, declining, significance, 1295
pumping (P), 563
deep-well, 299
problems, 556
sucker-rod, 717
sucker-rod replacement by tubing, 424
radiological exploration (P), 563
reconditioning, 34
repressuring, 23, 427, 438, 551, 559, 719, 724, 725, 726, 728, 729, 922, 1110, 1303
reserve evaluation, 1005
reservoir characteristics, 447
reservoir performance of limetones, 1008
reservoirs without gas-cap, 999
resistivity logging, 442
retrogade condensate unloading, 433
salt water detection (P), 1313
disposal, 25, 206, 293, 300, 301, 437, 720, 926, 1016, 1017, 1309
encroachment, measurement, 36
return to formation, 560
sampler (P), 1313, 1919
sand channel closure by blasting, 562
sealing deposit (P), 1313
secondary-recovery wells, completion of, 22, 434
shooting, multiple-zone or selective, 21
six gravity oil, handling, 205
temperature influence on oil yield, 619
thermal energy for secondary recovery, 426
triple injection, 443
unit operation, 721
waste water, purification (P), 1313
sulphide determination in, 38
water boil control, 1018
water displacement by gravity, 998
water-drive reservoirs, control of, 1217
water-flooding, 285, 290, 294, 295, 422, 557, 558, 723, 915–918, 1013, 1014, 1109, 1306–1308
coring with oil aids forecasts, 1205
input profile determination, 441, 445
use of soaps in, 286
water in reservoirs, interstitial, 435
properties of, 431
water movement in oil deposits, 202
wax deposition control (P), 1019
well cleaning, 924
well repairs, plastics in, 1012
well-spacing problems, 28, 204
well treatment (P), 303
Production Equipment :
bottom-hole intermitter (P), 1019
choke, bottom-hole (P), 303
Production Equipment—*cont.*
choke-valve borehole indicating system (P), 303
cleaning apparatus (P), 303, 304
combined bottom-hole regulator and choke (P), 303
communal gauge, 39
condensate plant, 552
control head flange (P), 563
electrical logging (P), 563
electrothermic processor (P), 740
filter (P), 563, 1019
fluid influx indicator (P), 1313
formation location (P), 563
formation tester (P), 1313
gas-lift (P), 563
life of, increasing, 420, 425
liner screen (P), 303
meter for plurality of wells, 421
packer anchor (P), 1019
packers (P), 303, 1019, 1313
plugs (P), 303
Paloma unit, 1301
plugbacks, plastics, 207
pressure determination, sub-surface (P), 563
production potential determination, 563
pumps (P), 303, 740, 1019, 1313
electric, 302
for dual-completion wells, 23
increasing life of, 420
jet, 1313
portable base, 1311
size selection, 37
submersible, 279
radioactivity logging (P), 740
rubber, synthetic, in, 901
scrapers, automatic, 1106
screen (P), 1313
sucker-rods, causes of failure, 35
tank batteries, floating, 1017
tubing corrosion measurement, 446
valve, surface-operated (P), 563
valve structure (P), 1313
well tester (P), 1919
Propane–Oil Mixture, viscosity, 820
Propargyl Alcohol, preparation, 84
n-Propylbenzene, heat of combustion, 639

Quenching Fluids, 516

Refineries :
Aruba, 326
Cities Service Lake Charles, 470
fire protection, 814, 815, 816
management, 1040, 1189
Marcus Hook lubricating oil plant, 473
North American, 786
safety in, 638
Santa Maria Valley absorption plant, 225
Saudi Arabia, Ras Tanura, 1129, 1324
Utah Oil Refining Co., 943, 1139
Refinery Engineering, heat exchange problems, 62, 63

Refinery Plant :
absorber design, 1327
acid tanks, ceramic linings for, 1039
boiler metal embrittlement, 1317
circuit breaker dangers, 813
compressed air operation, 1320
compressor piping design, 1323
condensate removers, 328
condenser tubes, scale removal, 783
cooling-water systems, 574
corrosion, 223, 785, 942, 1314–1316
counter-current gas–liquid phase treatment, 575
cylindrical shells, stresses in, 1124
design, effect of post-war demands, 241
ejectors, theory, 1321
electrical equipment design, 60
fireproofing, 1346
flow-meter, differential type, 582, 806, 807
foundations, concrete requirements, 616
fractionation columns, capacity, 1131
plate calculation, 1325
Pouchon method of computing, 1228
gas dehydration, 803
heat exchangers, design and operation, 327
for hot HCl gas, 799
maintenance and repair, 1126
hot towers, sliding bearings, 781
maintenance, 938, 939, 940
mixing and reaction equipment design, 1037
natural gasoline, safety precautions, 1230
pressure vessels, lining technique, 1038, 1125, 1227
pumping technique, 224
pumps, for alkylation units, 59
packing of, 779
rupture diagrams, 811
safety valve maintenance, 1322
solvent extraction, 1133
steel, thickness measurement, 1143
time control, electric, 808
turbine maintenance, 471
Refining :
acid removal by alkali metal hydroxide (P), 636
adsorbents, Chinese clays as, 1042
agitation problems, 1033
batch and continuous processing compared, 1029
batch conversion to continuous, 1034
catalyst preparation (P), 339
chemical and physical processes (P), 339
catalytic (P), 637
continuous flow process, 1030, 1031, 1032, 1035, 1036
crude oil, Kansas–West Texas mixtures, 1127
crude oil evaluation curves, 654
dehydration with activated alumina, 1132
feed stocks, heat of evaporation, 1148
Refining—*cont.*
fluorine removal (P), 339
fractionation, 789, 790
tower temperatures, 1130
gasoline (P), 637
heat transfer, fluids comparison, 624
hydrogen sulphide removal, 72
kiln time formula, 782
laboratory control, 784
lubricating oil, by contact filtration, 635
modernized processes, 944
process blueprints, 801
processes (P), 72*a*
reflux computations, 1326
Skelly sweetening process, 1141
sulphur removal (P), 72*a*, 228, (P) 339
temperature control, 1341
unit operation, 1237
use of clays in, 71
water treatment, 1318, 1319
wax removal (P), 331
West Texas sour crudes, 61
Resins, phenol-modified (P), 613
Rocky Mountains, crude oil types and occurrences, 126
Roumania, Ploesti, damage by U.S. bombers, 1191
Rubber :
post-war production, 239
synthetic, GR-S compounds, 851
aldehydes from by-products, 73
bibliography, 151
in oilfield operations, 901
outlook, 153
petroleum for, 1179–1182
plant and production costs, 156
post-war demand, 157
Russia. *See* U.S.S.R.

Saudi Arabia :
developments, 573, 689
new field, 984
Ras Tanura refinery, 1129, 1324
Sealing Compound, preparation (P), 373
Shoch Gas Production Plan, 921
Shales :
bituminous, from Manturov Deposit, 145
oil from, 146
oil from by thermal solution, 521 522
Shale Tar, phenols in, 144
Sludges, shale-oil, 1177
Soaps, dry-cleaning, 515
Solids :
dielectric properties, 342, 343
surfaces of, 105
Soluble Oils, preparation and application, 514
Solvent Extraction :
lubricating-oil fraction (P), 66
oxidation inhibitor (P), 626
processes (P), 331
Solvents, volatile, vapour recovery, 642
South Africa, Rietbron, wildcat drilling, 403

South America :
geophysical prospecting, 267
oil geology, 684, 685
production, 216
Spectrophotometer, infra-red, for hydrocarbon analysis, 644
Spectroscopic Analysis, computing instruments for, 231
Spheres, velocity in fluids, 117
Spiropentane, isolation, 99
Storage, crude oil, 1237
Storage Tanks :
bottom sampler, " Eagle," 1372
concrete, gasoline proofing, 465
corrosion protection, 322
evaporation prevention, 772
for butadiene and *iso*butylene, 777
heating coils for, 58
horizontal cylindrical, capacity charts for, 57
oil depth measurement, 1046
pressure, design, 776
strapping, 56
underground concrete, 321
Styrene :
from benzol, 666
halogen-containing polymers from, 108
heat of combustion, 639, 640, 951
polymerization, 1145
Sulphated Oils, 606, 838, 848, 1392
Sulphonated Oils, neutralized, surface activity, 674
Sulphonates, from petroleum (P), 602
Sulphur, estimation by lamp method, 1368
Surfacing Material, preparation (P), 373
Synthetic Fuels, 233
Synthetic Resins :
contact pressure, 240
silicone, 152
Synthol Process, 804

Tank Cars, loading precautions, 79
Tankers, paints for, 377
Tar Products, hydrogenation, 793, 794
Teepol X Wetting Agent, 518
Ternary Mixtures, distillation, 1041
Tetralin, oxidative cracking, 1044
Texas :
Anahuac formation, 878
Central, oil shales, 148
completion practice, multi-zone, 439
East, Carthage gas field, 976
correlation of Pecan Gap and Annona formations, 180
New Hope field, dual completion programme, 436
production, 754
salt water disposal, 437, 1309
Woodbine sand waters, 880
1943 developments, 211
gravity anomalies of Nash and Damon Mounds, 700
Miocene formation, 879
North, 1943 developments, 211
South, 1943 developments, 211
South-West, Willamar Field, 250
Texas—*cont.*
TXL field, 1193
Upper, Gulf Coast developments, 1943, 211
West, developments 1943, 211
West-Central, 1943 developments, 211
West Ranch oilfield, 177
Thermobarometer, 1247
Thioacetophenone, condensation with activated nickel, 349
Thiophene Process, 842
Timber, preservation, 600
Toluene :
from toluole, 650
heat of combustion, 639
Toluol :
benzene and toluene separation, 650
purification (P), 1173
synthetic, preparation, 74
Transport, crude oil, 1237
Trinidad, crude oils of Bernstein field, 232
Triphenylmethyl Chloride and Bromide, X-Ray examination, 346
Tubes, thin, bending, 780

U.S.S.R. :
Caspian Sea discovery, 10
Institute of Combustible Minerals, 675
Manturov deposit shales, 145
marine drilling near Baku, 401
natural gas developments, 1251
oil developments, 621
Palvan Tash, Turkestan, field, 891
production, 459, 691
Syzran, 402
Ukraine oilfields, 767
United States :
Appalachian area, developments, 211
Anadarko Basin, 979
completion statistics, 43, 45, 49, 55, 212, 213, 217, 219, 220, 304, 309, 311, 312, 316, 317, 385, 451, 455, 456, 458, 459, 464, 564, 566-568, 747, 748, 751, 756, 757, 928, 929, 1025, 1026, 1101, 1225, 1226
Delaware Basin, Upper Permian Ochoa series, 881
Eastern Basin development, 211
Elk Hills development, 40, 46
exploration, 186, 244, 257, 539, 866, 974, 975, 1091, 1197
footage drilled in 1944, 79
Fullerton Pool, 1114
geophysical operations in 1944, 899
Gulf Coast geology, 684
Hugoton gas field, 1272
marine oil possibilities, 1270
motor fuels, properties of, 367
natural gas reserves, 1113
natural gasoline production, 752
North Mid-Continent developments, 1943, 211
petroleum developments for war, 967
production, 313, 745, 746, 750, 753, 755

United States—*cont.*
refineries, 786
regional geologic studies, 161
reserves, 47, 692, 693, 867, 869
Rocky Mountain Region, developments, 211, 677, 678
electric logging in, 877
South-eastern, developments 1943, 211
Oligocene stratigraphy, 865
wax production, 137
wildcat completions and discoveries, 11, 13, 185, 194, 249, 260, 261, 264, 392–394, 404, 565, 694–699, 868
See also separate States.

Vanadium, determination, microcolorimetric, 496
Vapour Pressure–Equilibrium Constant Data, correlation of, 115
Vegetable Oils, fuels from, 653
Venezuela :
completions, 41
Creole Petroleum Corporation, 325
Cretaceous production, 1088
Delta Amacuro field, 1200
El Roble field, 1022
exploration, 218, 536, 766
fossils from metamorphic rocks, 171
Guico field, 400
Tusepin field, 765
Mercedes Field, 42, 463, 686, 1220
North-eastern Anzoategui, stratigraphy, 173
northwest Zulia discovery, 887
production, 52, 307, 621, 933, 1117, 1221
reserves, 1021
San Joaquin field, 977
Santa Barbara extension, 981
wildcat, 12, 252, 262
Vinyl Resins, use in footwear, 378
Virginia, deep well stratigraphy in Russell County, 166
Viscometers :
Bingham type for plastics, 1154
calibration of, 1064
Viscometer :
constant-level-flow, 1065
low temperature, 1050
survey of, 1249
U-tube type for low temperatures, 1150
Viscosity :
effect of physical properties, 1049
Viscosity—*cont.*
increase of in H.F. electromagnetic field, 1048
liquid mixtures, 1231
low temperature, 1051, 1232
method standardization, 1365
Philipoff method, 1055
precision and accuracy, 1149
theory, 1353
variation with temperature, 1352
Viscosity Index, rational basis for, 1165

Washington, exploration, 978
Water :
dry residue determination, 647
nitrous oxide determination, 648
Water Analysis, conversion factors, 823
Waterproofing D-Day Invasion Fleet, 1185
Wax, Paraffin :
melting, setting, and solidifying points determination, 822, 1066
composition, 1266
oxidation products, 840
testing and properties, 1187
Weed Killer, 2 : 4-dichlorophenoxy acetic acid, 611
West Virginia :
Cabin Creek, water injection, 1307
deep well stratigraphy, Harrison County, 165
Wetting Agents :
from petroleum, 847
fundamentals of, 1058
World :
deepest wells, 907, 1294
oil atlas, 386
oil reserves, control of, 617
production, 255, 305, 623, 741, 742
production centres, 258
reserves, 256, 743, 744, 864
Wrapping Materials, moisture permeability, 359
Wyoming :
Como Bluff anticline, 882
Crooks Gap discovery, 193
geology, 1196

X-Ray Diffraction, 1059, 1158, 1242
m-Xylene, heat of combustion, 639
o-Xylene, heat of combustion, 639
p-Xylene, heat of combustion, 639
Xylole :
saturated hydrocarbons from, 651
styrene from, 651

BOOKS REVIEWED AND RECEIVED, 1945.

Numbers refer to pages.

Adam, J. L., *Structural Design of Oil Tankers*, 171A

American Petroleum Institute, *Proceedings, 24th Annual Meeting of A.P.I. Section IV. Production*, 52A

American Society for Testing Materials, *Standards on Petroleum Products and Lubricants (1944 edn.)*, 171A

Ammosov, I. I., *O Genezise Uglya Leninckogo Mestorozhdeniya Kuzbassa (The Genesis of the Coal of the Lenin Seam of the Kuzbass)*, 378A

British Standards Institution, *Flow Measurement (B.S. Code B.S. 1042 : 1943)*, 170A

Summary of British and American Standard Specifications for Iron and Steel (B.S.S. No. 1111 : 1943), 170A

Temperature Measurement (B.S. Code 1041 : 1943), 170A

Brooks, B. T., *Peace, Plenty and Petroleum*, 79A

Combined Production and Resources Board, *Report of Conferences on Standardization of Screw Threads and Cylindrical Fits*, 52A

Dallavalle, J. M., *Micromeritics—The Technology of Fine Particles*, 300A

Deem, A. G. *See* Keyes, D. B.

Dickson, C. B., *The High-Speed Compression-Ignition Engine*, 268A

Gaydon, A. G., *Spectroscopy and Combustion Theory*, 268A

H.M. Stationery Office, *Benzole and Coal Spirit (G.B.)—Statutory Rules and Orders, 1944, No. 988*, 51A

Kapelyushnikov, M.A., *Science and Technology in the Oil Industry*, 51A

Keyes, D. B. and Deem, A. G., *Chemical Engineer's Manual*, 300A

Lavine, I. *See* Zimmerman, O. T.

Lawrie, J. P., *Methane, Its Production and Utilization*, 171A

Lewis, H. K., & Co., *Medical, Scientific and Technical Lending Library*, 171A

Morell, R. S., and others, *Synthetic Resins and Allied Plastics (2nd Edn.)*, 268A

Murav'ev, I. M., and Trebin, F. A., *Kurs Exsploatatzii Neftyanuikh Mestorozhdenii (Course on the Exploitation of Petroleum Deposits). Part I. Physical Basis of the Obtaining of Petroleum and the Principles of the Development of Petroleum Deposits)*, 50A

Ospina-Racines, E., *La Economia del Petroleo en Colombia*, 52A

Pogue, J. E., *The Purpose of an International Oil Agreement*, 51A

Polish Ministry of Information, *Polish Fortnightly Review (Petroleum Number)*, 51A

Preston, R., *A Review of the Literature on the Oxidation of Bituminous Materials with Special Reference to Road Tar*, 50A

Pursey, H. J., *Merchant Ship Construction : Especially Written for the Merchant Navy*, 268A

Rebinder, P. A., Shreiner, L. A., and Zhigach, K. F., *Hardness Reducers in Drilling (Poniziteli Tverdosti v Burenii)*, 170A

Shreiner, L. A. *See* Rebinder, P. A.

Snell, C. T. *See* Snell, F. D.

Snell, F. D., and Snell, C. T., *Chemicals of Commerce*, 268A

Spiers, H. M., *Technical Data on Fuel (4th Edn.)*, 171A

Suckling, E. V., *The Examination of Water and Water Supplies (5th Edn.)*, 171A

Thorpe, J. F., and Whiteley, M.A., *Thorpe's Dictionary of Applied Chemistry, Vol. VI (Glau–Inv.) and Index to Vols. I–VI*, 220A

Trebin, F. A. *See* Murav'ev, I. M.

Ungewitter, C., *Science and Salvage*, 79A

U.S. Office of War Information, *Developments and Trends in American Industries. Oil Mining and Refining : High Octane Gasoline*, 51A

Volarovich, M. P., *The Viscosity of Lubricating Oils at Low Temepratures (Vyazkost' Smazochnuikh Masel pri Nizkikh Temperaturakh). Part I*, 170A

Whiteley, M. A. *See* Thorpe, J. F.

Zhigach, K. F. *See* Rebinder, P. A.

Zimmerman, O. T., and Lavine, I., *Chemical Engineering and Laboratory Equipment : Design, Construction, Operating*, 268A